

Learning the 'LessN'

Donaghys LessN® monthly update

NOVEMBER / DECEMBER 2010

Welcome to the November/December edition of *Learning the LessN*. With December already upon us the old cliché of 'where did the year go' is ringing true. I hope all have had a good year and that 2011 brings even greater fortune. It certainly has been a tough few weeks and our thoughts and prayers go out to the families of the Pike River Coal Mining tragedy.

Most of the country has been experiencing very high temperatures of late, coupled with minimal rainfall. This has many farmers nervous about the prospects of another summer and autumn of drought. Unfortunately the prospects do not look good, with NIWA already confirming that the country is in the grip of another La Nina weather pattern, and that drought conditions were again likely for Taranaki, Waikato and Northland.

December sees the start of Donaghys special offer on Mycotak fungicide for the prevention of Facial Eczema. For every 5kg of Mycotak purchased in December, farmers

will receive an additional 1kg pack of Mycotak for free. That's enough to cover another 5 hectares for no extra cost! See your local farm retailer or vet now!

As this is the last edition for the year, I would like to thank all Donaghys clients who have been supporting our products this year, and hope you all have a good festive season.

All the best for the month ahead.

Nigel Johnston,
Biotechnology Manager, Donaghys.



Donaghys LessN® - Farmer of the month

A strong advocate of LessN is Geraldine farmer and contractor Kris Orange of Downlands Deer Ltd. About two years ago, Kris read an article in a rural newspaper about LessN. It described the benefits of LessN as being reduced nitrogen use, quicker response times and environmental protection.

"After I received the info pack including copies of trial work, I attended a field day meeting with Donaghys. After I digested the information, I was that impressed, both as a contractor and a farmer, I decided to build a spray rig capable of spraying LessN", Kris says.

"We sprayed our first paddock and were suitably impressed. We put a large tarpaulin on part of the paddock when we applied it as part of our own trial. After 14-15 days the square was noticeable. It had shorter grass and it was not as green as the rest of the paddock. There was no doubt the product worked and after 21 days was grazed off. It meant the potential of the urea in the paddock was realised more than a week earlier than if broadcast by a spreader".

Kris says the ability to spray LessN along with other products such as GibbSTART and phenoxy herbicides in one pass is brilliant. And being able to

apply it without rain means there is no wastage into the atmosphere. LessN also works well on brassica crops such as kale and turnips, another plus.

"As a farmer I have been more than happy with the results on farm and it is great to add another string to our bow as a contract sprayer. I am impressed with the amount of repeat business we are getting. That means the product speaks for itself".



Kris Orange, Geraldine



Research Update -

Lincoln University Research showing exciting LessN results.

As part of Donaghys continuing research into LessN, Lincoln University has been undertaking intensive *in vitro* bioassay mode of action studies to help get a better understanding on how exactly LessN is working within the plant. Other research has been looking into what effect LessN has on drought tolerance in plants.

Following is a brief summary on the first findings of this research from Lincoln University's Professor Rainer Hofman who has been heading this work on LessN.

MODE OF ACTION

The *in vitro* bioassay studies with LessN indicated plant growth regulator effects on cotyledons, improving excised leaf growth. LessN also increased estimated leaf chlorophyll

concentration relative to control.

DROUGHT TOLERANCE

A glasshouse experiment in the Lincoln University plant nursery studied the white clover cultivar Grasslands Kopu II for nine weeks. The fertiliser treatments were applied as a foliar spray at a rate of 0 (control), 20kg/ha urea and 20kg/ha urea plus LessN. Drought was applied during the last six weeks of the experiment.

The findings indicated some beneficial effects of urea and LessN on white clover growth under drought. Drought-exposed plants receiving urea and LessN increased their total above ground dry matter by 16% when compared to control plants,



and by 21% when compared to plants receiving only urea, but no LessN. This effect was largely due to the urea and LessN effect on leaf dry matter. Plants exposed to drought and to urea and LessN showed 25% higher physiological water use efficiency of leaves.

Donaghys LessN[®] - News Update

LessN proving successful on the Emerald Isle

It is not just New Zealand farmers benefiting from using the LessN system, with one Irish dairy farmer also seeing great results. As part of Donaghys expansion into international markets, small on farm demonstration blocks have been established in key dairy areas around the world as well as replicated small plot scientific trials.

One such demonstration has been on Martin Lynch's farm in County Kerry. On the dairy grazing platform he applied three applications of

LessN and urea (kg/ha) at three week intervals. Following is Martins feedback on the applications.

"The grass grew as good as our normal routine of 180 kg's of 27% calcium ammonium nitrate. The cows also seemed to graze out the LessN applied paddocks better especially around the dung patches".

"We also used one application on land where we had taken a cut of silage. Again the re-growth after the silage cut was excellent and we subsequently grazed the ground with

the replacement heifers".

"On our dairy grazing pastures we would normally have eight or nine applications of fertiliser. Land closed for silage would get 250 units nitrogen per cut and 180 units after each subsequent grazing. Our fertiliser application season finished on 15th Sept because of EU regulations we are not allowed to spread after this date".

"Overall I am very pleased with the results from LessN and urea."



Donaghys LessN[®] - Tip of the month

Strategic use of LessN and urea to boost silage crops

With many parts of the country behind in grass growth and silage production there is still time for an application of LessN and urea to boost grass growth before cutting for silage or hay. As the LessN system involves foliar applications of urea and LessN, the uptake of the nitrogen into the plant is significantly faster meaning grass production will be lifted in a much shorter period. Under traditional spread urea applications the uptake of the nitrogen and subsequent lifts in production can take as long as 4 – 6 weeks, meaning the chance to lift pasture cover before cutting will be missed.

By using the LessN system, applications of dissolved urea and LessN can still be made now, enabling a quicker lift in pasture cover before cutting in 3-4 weeks time.



Donaghys Territory Manager of the Month

60 Seconds with Pete Shannon

Territory you cover for Donaghys?

I have been covering the South Taranaki, Wanganui and King Country, but am in the process of shifting to Canterbury to take over Mick Withers region of Ellesmere and Mid Canterbury.

How long have you worked for Donaghys?

Four years

Favourite part of the job?

People – building relationships with clients and working with an innovative company collectively driven by a wonderful group.

Interests outside of work?

Family, running, following sport.

Greatest achievement outside of work?

Running two marathons in 2010

Dream job?

A professor specialising in environmentally friendly and cost effective application of urea.

If you could change one thing about the New Zealand agricultural industry what would it be?

Have every farmer using the LessN system – such a common sense approach with a win win result, environmentally friendly, cost effective, better grass, more milk. Time for farmers to do what's best for them and their income.



Other news from Donaghys -

Donaghys to continue its association with Emirates Team New Zealand

Donaghys are pleased to continue our association with Emirates Team New Zealand (ETNZ) as rope supplier of choice for the upcoming 34th America's Cup campaign in 2013 and the Camper 2011-12 Volvo Ocean Race campaign.

Like Formula One, these races are the ultimate testing and proving ground and Donaghys see our involvement with ETNZ as crucial to the advancement of our own marine braid range.

Donaghys have supplied yachting braids to winning teams in Round the World races and America's Cup campaigns for many years, performing in some of the world's most rigorous conditions. As Grant Dalton from ETNZ stated "Reliability is key to not losing; never in all our racing have Donaghys products let us down."

Donaghys association with ETNZ began in 1995 when Team New Zealand won the America's Cup, only the second challenger to do so in the Cup's long history. Since then Donaghys have continued to support the team working with them to develop state of the art braids in an effort to give ETNZ an advantage out on the race course.

ETNZ are one of the few America's Cup teams to survive the 3 year hiatus since the 2007 event. The team has diversified to be involved in four separate projects:

- The Louis Vuitton Pacific Series – held in Auckland in 2009 and won by ETNZ. Has now become the Louis

Vuitton Trophy and three further events have been held to date with ETNZ winning 3 of the 4 events. The final Louis Vuitton regatta was held in Dubai on 12 November.

- TP52 Audi Med Cup – ETNZ were successful in winning the 2009 & 2010 Audi Med Cup series.
- Camper Volvo Ocean Race.
- 34th America's Cup to be held in 2013 - Featuring Wing sail (multi-hull) 72 foot catamarans. There will be three lead up regattas next year and launch of the new boat will be in January 2012.



DONAGHYS INDUSTRIES LIMITED

16 Sheffield Crescent, Harewood

PO Box 20 449, Christchurch

Freephone: 0800 942 006 Freefax: 0800 945 779

Email: njo@donaghys.co.nz

Web: www.donaghys.com

DONAGHYS
PERFORMANCE FIRST