

Enhancing soil, plant and animal health 0800 66 88 100 www.magnifynz.co.nz info@magnifynz.co.nz

September 2022

Spring update for clients

We've had a lot of cool stuff going on so this is a little lengthy. Browse the headings / key points and check out the stories of interest ...

Lysimeters showing four-fold reductions in nitrates after second season

In late March we set up 'disturbed earth' lysimeters on a very typical dairy property running 3.5cows/ha. They used 190kgN/ha plus our recommended Magnify programme for dairy. The disturbed earth lysimeters (after applying urine in early June) have had 'joyfully' small levels of nitrates in the drainage water after 2 seasons treatment. On 26 August they were 3.2mg/L NitrateN. We expect further reductions. Other lysimeter studies in this region have shown 9 -16mg/L in the same time frame after urine application on dairy farms, which resulted in leached N of around 47kgN/yr in a wet season like this. Drinking water standards for Nitrate-N is 11.3mg/L and the proposed target under the three waters scheme is 3 mg/L. The soils are Ruapuna which are shallow well-drained stoney silts with medium risk for nitrate leaching. Disturbed earth lysimeters give elevated readings until they settle, which can take years so we also set up an undisturbed small lysimeter on 24 August. This has had no urine. Our first reading from Hills Lab is a puny 0.57mg/L (zero point five seven mg/L). Mind-blowingly low !! (3-10mg/L is normal). **Our clients are breathing a sigh of relief** that they have a solution to water quality that also gives very positive economic returns ! We've had a four-fold reduction between 1 & 2 years treatment.

M Brand Change

Key point : We changed our name from Biohelp NZ to Magnify NZ and condensed our product range to create four superior products.

Overall we got through a very challenging business transition. We separated from our exclusive sales distributor of 20 years - and went through a branding change from Biohelp NZ to Magnify NZ. Creating new websites, brochures, labels etc was very time consuming. We had no access to our old distributor's client database (they've since closed their doors) so we couldn't contact previous clients. Thank you so much to our long term clients who stuck with us last year. We've come through pretty well but know we weren't able to make contact with all our Lambex clients.

We had too many products to market, so have reduced our products to 4. Microlife became **Magni-Life**. **Magni-Grow** was created by incorporating 3 Biohelp products - Terrazone, Solmn (marketed by our distributor) and CM3 original. We also added seaweed, humates and fulvic acid. Individually these products would cost \$130/ha when added together. Now just \$65/ha for the full 7L/ha rate. By enhancing the synergistic effects between products we have been able to take another quantum leap forward for your and hopefully our benefit.

Magni-Grow adds 700kg-1200kg in just 5 weeks (replicated field trial)

Story behind In late March we applied 7L **Magni-Grow** (through a single rosette nozzle) to different parts of our dryland Rangiora block, plus the neighbour's irrigated pastures. After 5 weeks - and prior to grazing - we measured an extra 1200kg (6.5 bales of balage) where the water table was higher and red clover present. 700kg where there was new ryegrass/clover plantain and a higher water table. 700kg on my neighbour's older pasture and 200-400kg where it was too dry to see any visual growth from anything. Regrowth advantage at 5 September after grazing was 459 kgDM/ha better (P < 0.0015) – an extra 2.5 bales of balage. Current return on investment is 6 cents/kg which is exceptional given the growing conditions and time of the year.

The best we had measured from our old Biohelp products in these situations was 500kg/ha over that time frame. The pastures were set grazed over Winter and shut up again in mid July. Stronger regrowth is evident across most of it at time of writing.

M Last season's summary

Key point : All our pasture & crop clients have done better than average

Canterbury :

Our clients had a better-than-average season compared to most other people. Spring saw them growing more grass than many others who were using a lot more Urea. Some were down a little - 4% - on the previous season but saved a lot on supplementary feed. They also had low or improved conception rates. Tanners' farm consultant said all his clients except John were down 7-10% for the season with grass quality plummeting in November. On far lighter soils (having used 100kg less nitrogen per hectare) Tanners were typically ahead of the Lincoln University Dairy Farm (LUDF) by 10 - 15kg of growth/day from February onwards. Tanners' conception rates were the best among his farm consultant's clients. **Magni-Grow** has been used in progressive sections of the farm for 3 years. Each area has changed by over 20kgDM/day after 2-3 months. The remaining 100ha of the 170ha milking platform was treated in January and it was after this that the farm's overall growth began to be ahead of LUDF for the first time. As an indicator of the season, the LUDF was 10% down in production with 21% empties and they used 700kg of supplement per cow - twice as much as the previous season.

In North Canterbury it was a very dry Autumn and irrigation was occurring in early May. Consequently, dryland farms got very little Autumn growth.

Southland :

One of our Southland clients who is in his 80's described the Autumn/Winter/Spring period last year as the worst he had experienced. Then a Summer/Autumn drought happened.

It's easy to get down emotionally with those sort of conditions. How do you assess growth performance in these conditions? Well Rudi from R & J Agrispray said a couple of clients had calculated 14.5 ton and 12 tons dry matter for the season. Magnify was part of Rudi's recommendation. How does that compare with regional averages?

Dairy NZ studied average seasonal grass growth between 2007 and 2012. The range was around 11 - 14.5 tons for Seaward Downs, Telford, Tapanui, South Hill End & Woodlands using 0 - 132kgN/ha. The top yield was 14.5 tons in Wallacetown (using 176kgN/ha). So to us, producing 14.5 tons with as little as 80kgN/ha was a very good result given the season. What's interesting is the grass growth hasn't changed much since this data was released.

The LUDF did 21.4 ton using over 300kgN/ha between 2008-2015 and last year they did about 16.5 tons using 160kgN/ha. AgResearch said a few years ago that plant breeding had only added about 6% to pasture growth over the last 20 years. So 'well done' our clients last year all of whom did better than average with less nitrogen inputs and less supplements.

Winter application - absorbing nitrogen at a critical time of year for leaching & gaining feed

Key point : Magnify boosted Winter growth 200-400kgDM/ha (16 June-4 Aug)

Story behind In Canterbury, farmers are prohibited from using nitrogen fertiliser from May to August. Over 50% of leaching occurs in June and July. Growing more grass through these months absorbs ready-to-leach nitrogen and reduces feed costs in Spring. We previously trialled our old products with GibbGrow (starting in early May to mid July) and got gains of 750-1000kgDM/ha. We measured gains of 1200kg last year in Oxford, but that was after 2 applications starting 8 months prior. No Gibb was included. This level of extra growth sucks up over 30kg of leachable nitrogen - probably half of what many dairy farms have at present.

Dave Taylor from Landcare NZ was confident **Magni-Grow** would give extra grass even if applied in early June. His client along the banks of the Rakaia River applied his first ever Magnify product in mid June. In spite of 3-4 times the average monthly rainfall (+ hardly any sunny days + older pastures + very late hard grazing) we actually got average growth increases over the first 47 days of 96, 150 and 390 kg/ha across the 3 measurable paddocks. The oldest and grassgrub-affected paddock that was grazed heavily in early June was the worst and the younger paddock the best. Statistically the average difference was +160kg (p>0.0073). That's a bale of balage per hectare. We guestimate that was around 60-100% improvement. So even under really cloudy, rainy Winter conditions, **Magni-Grow** paid for itself in less than 47 days. Based on past studies and the knowledge that **Magni-Grow** is more powerful than any product we have tested in the past, we are confident that **Magni-Grow** plus GibbGrow applied after the final grazing would give a minimum of 700 – 1000 kg/ha extra cover in the first round of the new season. That would be a 400% return on investment based on silage savings in early Spring plus a huge reduction in leaching. A win-win. This farm used 190kgN/ha last season as liquid with humates and fulvic acid.

M Transforming a dryland North Canterbury property

Key point : From 600 bales to 1800 bales in just two years with Magnify

Story behind ... Steve and Andrea Reardon bought a 70ha dryland farm near Oxford. The fertility was low & droughts over the years had an impact on grass quality. A very typical dryland farm on light stoney soils in areas that go dry in Summer. He decided to target production, soil health and profit first - then address any remaining fertility issues. Decent balage cuts were essential for a profit target of \$1000/ha to be achieved. He had made some gains in soil health and production using humates/fulvic acid plus 23kg liquid nitrogen, but still only made 600 bales balage. There was still a loss financially. To achieve profit he had to double the balage cut from the same pastures & area. Dave Taylor from Landcare NZ introduced me to Steve and we started him on 2 applications of **Magni-Grow** per year and 1 to 2 (50-70kg) applications of Ammo 31 (15-21kg nitrogen). In the first Spring - using Magnify products and recommendations - he cut 1200 bales and last Spring he got the equivalent of 1800 bales off the same area. That was around 24 x 200kg bales/ha. **This is an example of the compounding effect of Magnify.** Nitrogen was needed until the ground began to generate enough nitrogen to grow from. **Well done Steve and Andrea for turning this property around!** Doing the best for the water quality was a high priority as the Ashley River (which now suffers from toxic algae in Summer) was only a few paddocks away from their property.

Magni-Lamb encourages a cow to it's feet

Key point : Great for cows that go down (Magni-Calf also works for this)

Story behind In May a very experienced farmer (in his 80's) kindly phoned to say he would have no hesitation endorsing **Magni-Lamb**. He had a cow that had been down for nearly a week in spite of 2 unsuccessful vet visits and \$500 in vet bills. Putting her down seemed inevitable. Dave Taylor drenched roughly 120mls of **Magni-Lamb** into her and within 12 hours she was up and walking again (cost \$5). The farmer was planning on drenching his calves pre-sale and at weaning to keep them from going backwards at these important times. Another client's calves got scours in Summer with all the lush feed in Canterbury. Drenching for worms achieved nothing. 50mls **Magni-Lamb** cleaned them up. We had great feedback from our **Magni-Lamb** and **Magni-Calf** clients last year.

Magni-Life vs fungicides

Key point : Magni-Life did as well as fungicides in fungus control

Story behind Last season in a farmer-run field trial, 3 applications of fungicide were replaced with 3 applications of **Magni-Life**. 16 ha out of 200 ha of barley had **Magni-Life**. There was no difference in disease pressure at harvest. Two years ago they trialled 3 litres **Magni-Life** treated barley by the first fungicide on barley. There was significantly less disease on the **Magni-Life** treated barley by the time the second fungicide was due to be applied. The advantage of **Magni-Life** over fungicide is it maintains beneficial fungi necessary for soil structure. In this light stoney riverbed country this is important for future crop yields, water retention & nitrogen leaching. Consider trialling this or replacing 1-2 fungicides. Note this property has had Magnify products for a number of years.

Magnify 'magic' 3 years after application



Our Production Manager Glenn is still amazed at the growth in a strip of our lawn that had the super concentrated dregs of a tote spill out onto it 3 years ago. It is still growing about 300% more grass with darker green colour. To get this concentration per hectare would cost about \$10,000/ha so it's not a practical thing to do onfarm but it does clearly demonstrate the incredible power of Magnify on long term changes to grass growth.

M Website - www.magnifynz.co.nz

The marketing company we used for re-branding advised us to 'say it and show it' rather than use brochures. So our website has many videos & client interviews. Many of you are keen to spread the word but it's a difficult subject to describe in one sentence, so the videos will hopefully fill in the gaps. There are improvements to make and my videos can always be improved. We have 3 more great client interviews/stories to create as soon as I can find time. The website is designed to attract a conversation rather than sell to people on the spot. I am definitely behind on where I hoped we would be by now with this marketing tool, but it is still receiving good comments as it is.

We'd love to hear from you if you'd like to chat over how our new products can add more value to your farm.

Scott Hobson, Managing Director, Magnify NZ Ltd 0800 66 88 100