

Products & Advice for Soil Regeneration & Animal Nutrition



From the Directors...

It comes as no news to the agricultural industry that the relentless high cost of fuel is a huge burden to bear, and by all accounts there appears to be little relief in sight. And of course, not only are prices impacting on production costs, but are creating flow-on rises in transport and feed costs.

In this edition of our newsletter we aim to bring you some good news with regard to surging fuel prices.

Read how the application of Natra Min and the subsequent improvement in soil structure delivered a reduction in fuel consumption of up to 40% for farmers Brett & Leanne Warne.

With industry experts predicting fuel prices are yet to reach their peak, the conversion to Natra Min or one of its various blends, may be a decision well worth making.

The nutritional, biological, and production benefits of Natra Min are well documented and it is the benefits associated with **reduced tillage costs** that are currently being experienced by farmers as a significant financial benefit.

In addition to savings on fuel consumption, depending on the type of cropping, you can often enjoy further savings by gradually reducing the amount of water-soluble fertiliser used.

For further information on how Natra Min can help reduce your fuel expenses and at the same time increase production, contact one of our experienced Field Advisors now on 1800 81 5757.

Our Congratulations to Keith and Annette Willcocks of Tenterfield, who use Superior Mineral Supplement as a grain additive. They have enjoyed a successful year at Royal Brisbane Exhibition, taking out two Reserve Champions in the led steer competition and another steer taking out the Champion Heavy Weight Carcass after winning his class on the hook.

In addition to the benefits of using Superior Mineral Supplement as a grain additive, many farmers are also reporting improved conception rates despite dry conditions. It is always great to hear these success stories... so if you have one that you would like to share... please give us a call.

Warm regards... *Trevor and Wendy Zerner*

Fuel Saving of 40%



Ellangowan (South of Casino) farmers, Neil and Margaret, Brett and Leanne Warne have witnessed the benefits of using Natra Min on their property where they run a cropping program including Wheat, Barley, Oats for graze, Soybeans, Corn, Adzukis and Faber Beans in rotation, alongside their Droughtmaster Stud, "Cedardale".

Brett's farm management practices recognize the importance of a whole system approach which includes management of the soil health and structure, input costs, as well as plant health and production... with the major focus being on the ability of the soil when it is balanced to provide nutrients to the crop, while getting the maximum utilization of any fertilizer that is applied.

Improving pH Levels... and reducing Aluminium toxicity

Prior to utilizing Natra Min, pH levels on the Warne property ranged from 4.8 to 5.4. According to Brett, the consequence of these low levels spelt disaster. "Back then, we lost some of our soybean crop to Aluminium toxicity." (Aluminium becomes more available once soil pH drops below 5.5.)

"We had been given the recommendation to apply lime at 2t/ac to rectify our soil pH... instead we converted to using Natra Min as a fertilizer and soil conditioner. Today, some of these paddocks have a pH of 6.1."

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Brett & Leanne Warne (page 1,2)

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SUPERIOR Show Winners
Keith & Annette Willcocks, Tenterfield (page 4)

- ✓ **Improved Soil Structure**
 - ✓ **Reduced Fuel Costs**
 - ✓ **Reduced Fertilizer costs**
 - ✓ **Improved pH...**
- ... and Better Crops!!**

Repeat applications of Natra Min...

Some of the cropping land on the Warne property is in its fifth year of Natra Min, while the pastured areas have had Natra Min applied over a six year period. As well as closely monitoring his soil and crop, Brett regularly conducts leaf and soil tests to ensure his soil nutrition remains on track.

Reducing Fertilizer Expenses using Natra Min...

According to Brett, "we have a variety of different soils, some of which responded to lime and conventional fertilizers. Some didn't. Each year, working closely with our agronomist, our soils have improved from what they were when we started farming them."

"Natra Min was used on selected paddocks to trial which has given great results. The product fits into our whole farming system. This season there will be a minimal amount of Natra Min applied on summer crops due to our plant back window. Our plan is to fallow with Natra Min in winter."

The application of Natra Min as a soil conditioner to the property's poorer soils has resulted in a substantial decrease in the cost of fertilizer. Essential macro and trace minerals have been replaced and in effect, the property has been able to reduce its dependence on an ever increasing amount of water soluble fertilizer.

As Brett adds, "it's no good throwing fertilizer on soil that can't use the elements. Throwing more fertilizer on is just a waste of money. You feel good because you've put on what the book says your units should have been ... but that positive feeling soon fades when you don't get the expected results."

"We use Natra Min as a soil conditioner in place of lime because of the economics and the additional benefits Natra Min offers. We've found Natra Min to have longer lasting effects on the soil and its condition."

Better Crops with Natra Min...

For the Warne family, not only has Natra Min delivered benefits in improved soil structure and reduced farming costs, but also improved crop condition. Where Natra Min has been applied, the crops have shown to be less stressed and have the ability to "hang in longer in dry conditions".

According to Brett, "In our good soybean areas where Natra Min K was applied as a higher potassium blend, we don't use any other inputs for the following winter crop. The paddocks where Natra Min has been used the longest are definitely better ... the paddocks that were last to be converted have more rust in the crop. In these paddocks the soil structure isn't as good yet and after rain these paddocks stay anaerobic longer, contributing to the depletion of beneficial microbes."



Brett Warne and Roger Newman, Field Advisor for AgSolutions Australia, check out Brett's latest crop of Barley.

Natra Min has also been used on legumes and despite harsh conditions, Brett Warne managed to reap good results. As Brett adds, "when a minimal of crops were grown in the district because of dry conditions, we were able to direct drill soybeans in our worst country... yielding 1.8 tonne per hectare with a return of \$840/t. (Price was for stored grain sold three months after harvest because there was no carry over stocks available.)"

40% Saving in Fuel Consumption...

Another costly blow to our agricultural industry, the rising cost of fuel, is currently a volatile subject. Brett Warne has been particularly pleased with the effect Natra Min has had on soil structure, resulting in a reduction in tillage requirements which has contributed to a big reduction in fuel use.

According to Brett, they've experienced a **saving in fuel consumption of around 40%** due to the improvement in soil structure and friability resulting in less tillage with machinery and tractors not working as hard. As a result of better soil health and structure, Brett now cultivates increased areas without the need to increase the size of tractors above 170 hp.

As Brett adds, "where Natra Min has been applied we've gone from two passes with the tractor down to one. In other areas we couldn't direct drill and now we can... the soil structure has improved that much... even the tractors are working up a gear or two."

Brett concludes that Natra Min is now an integral part of their farm management practices. "Natra Min is part of our 'whole system' and seems to work quicker and last longer. We have less compaction and structural problems and our stubble retention has improved. We're treating the soil as a living thing and moving more away from the 'hydroponics' situation where poor soil health forces the use of high inputs for the crop to survive."

Benefits for Beef Cattle...

Cropping aside, Brett and Leanne's pastures have also shown benefits from repeat applications of Natra Min over the past six years and the quality of their cattle is a reflection of their management.

This year Neil and Margaret Warne, Cedardale Stud, will offer 22 Droughtmaster Bulls at the Roma Bull Sales in October - for enquiries about these cattle, or for further information about his success with Natra Min, call Brett on 02 6664 1309.

SILICA

the overlooked element that is essential for soil and plant health

For many years we have promoted the importance and benefits of Silica, a common but often overlooked element that is essential for soil and plant health. In recent times industries such as cotton, sugar cane, small crops, turf and even pastures are recognizing the potential benefits of Silica.

Silicon, often referred to as Silica, is just one of many 'bio-essential' minerals. Many crops grown here in Australia such as rice, barley, oats, cotton, wheat, rye, sunflower, corn, sugar cane, potatoes, forage crops and small crops all benefit from high levels of silicic acid in their cell tissues. Soil microbes convert silica to silicic acid (plant available form) for constant uptake by plants.

The benefits of Silica to your crop...

Improved yield... In a trial of sugar cane, applications of silica (calcium silicate) improved the sugar yield by 38%. Other trials have shown increased growth and yield in grain, legumes, small crops and tree crops.

Silica increases plant tolerance to drought, frost and lodging... Silica strengthens plant cells which means reduced water loss, less frost damage, more root growth and a decrease in lodging.

Fungal disease & pests reduced... Silica increases plant resistance to fungal disease and pest attack because of harder epidermal cells. Reduced brown spot, stem rot, powdery mildew and less caterpillar and aphid attack has resulted from the application of silica.

Benefits in high Salinity areas... Silica improves a plant's ability to survive and even thrive in high salinity areas.

Increases uptake of plant nutrients... Silica improves plant photosynthesis and aids in the plant uptake of nitrogen, phosphorus, potassium, zinc and molybdenum.

Sources: *Incitec Fertilizer Handbook 1990, Acres USA, Dr Lynette Morgan.*

Silica decreases toxicity... Silica regulates plant uptake of iron, manganese and aluminium thus helping to reduce their toxic effects on plant growth.

Improved colour and growth... Research has found that silica also plays a vital role and is essential for photosynthesis and chlorophyll formation (green colour) in plant leaves.

Availability of Silica in your soil... Silica is converted into plant available form (silicic acid) by soil microbes. If soil is microbe deficient or over-limed, the uptake of silica is reduced. Tests have shown that high organic matter in soil increases soluble silica while liming and the use of Nitrogen or Phosphate fertilizer lowers the soluble silica in soil.

Silica is not translocated in the plant... This means that Silica must be supplied through the entire growth stage if its benefits are to be carried through to all parts of the plant.

Silica Sources... Silicates are compounds of silicon plus oxygen with one or more metals. The minerals in Natra Min are in the form of Silicates... calcium silicate, potassium silicate, magnesium silicate etc, providing from 17.3% to 25% Silica depending on the Natra Min blend.

NATRA MIN

Naturally high
in Silica

Constant release for optimum benefits...

In addition to high levels of Silica, Natra Min provides a broad spectrum of mineral elements which will feed your soil, stimulate microbe and worm activity and result in a better uptake of the silica and other nutrients that are already present in your soil but not available to your plants.

Natra Min can save you money on Lime, Gypsum and Fertilizer costs... ask us how... Ph: 1800 81 57 57

Pasture Improvement with NATRA MIN



"We moved to the Mary Valley 4 years ago and purchased a property of 85 acres. We were seeking a lifestyle change and believed that we could establish and operate a few self-contained cabins along with some cattle.

We began work on the property infrastructure, which included the usual jobs of water, fencing, cultivation and pasture improvement. The land had been overstocked with agistment cattle and it clearly became our biggest challenge to improve the pasture.

We established 10 paddocks with water, which allows stock rotation, and it was at this time we realised the soil was 'speaking' to us. We had seen and heard of Natra Min and after a discussion with Trevor Zerner we proceeded with the first spread program.

Like everyone, we were looking for that magical lift in the country, but soon realised it was a question of time. In fact, it wasn't until our second application and some reasonable rainfall that we started to see the property really improve. The grasses have improved greatly and the trees (we have a scattering of eucalyptus, iron bark, & brush box) are really impressive.

It's difficult to achieve any reasonable returns from such a small property and to accelerate cattle numbers (steers only) we have begun a grain assist program which works very well. This is supplemented by crops such as grazing oats, millet and sorghum.

Natra Min has given us the confidence to take the next step, and ours is just a very small example of just how important and essential this product really is."

Len & Laverne Summers, Amamoor, QLD

Providing You with Products & Advice for Regenerative Agriculture



Ekka 2005 ... Congratulations to Keith and Annette Willcocks on your successful entries at the Royal Brisbane Show.

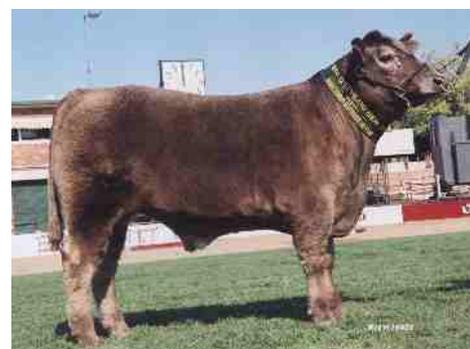
Reserve Champion Led Steers Champion Heavy Weight Carcass



2nd in light weight class on the hoof 375-400kg and Reserve Champion Light Weight Steer.



2nd in middle weight class 425-440 kg, and 2nd to Middle Weight Champion Steer.



1st in heavy weight section 461-500kg, Reserve Champion Heavy Weight Steer and Reserve to Grand Champion Steer.



Photo: Courtesy Queensland Country Life.

Congratulations to Keith and Annette Willcocks of Tenterfield who have enjoyed another successful year at Royal Brisbane Exhibition. Keith is pictured (left) with his prize winning Champion Heavy Weight Carcass.



Ekka 2005 "Superior" Led Steers

This is the first year Keith has used "Superior" (Mineral Supplement and Feedlot additive) in his grain ration and he is very pleased with the results, taking out two Reserve Champions in the led steer with another steer taking out the Champion Heavy Weight Carcass after winning his class on the hook... and picking up \$1200 in the jackpot.

Keith and Annette are well known around the ring of led steer competitions and began showing their steers in 1990. The Willcocks have won the Royal Brisbane Grand Champion Led Steer twice, in 1996 and 1997. However, Keith is quick to point out that this is just a hobby for him. "I get a lot of enjoyment out of it and you learn a lot about your own cattle. Most of all we meet so many good friends."

Keith often prepares steers in partnership with several other exhibitors and one of these steers also won the first lightweight class at the Ekka this year. Keith, we know you already have a calf picked out for the 2006 Ekka so we look forward to next year's results.

Lime, Bentonite, Feedlot 80 and Eskalin have been eliminated from Keith's feedlot ration...

Keith runs a full time feedlot on his property and supplies cattle to a local Tenterfield butcher. Superior is used throughout the feedlot mix and Keith says...

"Superior is doing the job and the cattle are doing well... there have been no signs of acidosis and the cattle are handling the grain. The manure in the feedlot is well formed and there are no scours."

Keith hasn't weighed his steers but says, "I just go by the look of my cattle, their coats are good and I'm pleased with their body condition and cover".

Keith mixes his own feedlot ration of sorghum, roughage and cottonseed with an overall protein level of 13 - 14%. "I use 15kg Superior per tonne of grain and no longer use lime, bentonite or Feedlot 80. Having used various other products in the feedlot over the years I can't see a need to use anything else now... the use of Superior Mineral Supplement is simple to add and cost effective."

Keith's knowledge is also sought after by the local High School and Keith has been mixing their feedlot ration for some time. "They used to use Eskalin (an antibiotic used to prevent acidosis) in their mix but it became difficult to get even with a prescription."

Now the High School's feedlot mix is the same as Keith's grain mix and Superior has become a convenient, cost effective alternative to all other feedlot additives.

So congratulations Keith and Annette... Keith certainly has an eye for quality cattle and knows that you need a good animal and a good feedlot mix to do well.

AgSolutions

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