

Over the fence

WINTER NEWSLETTER 2010

Ag Solutions

AUSTRALIA

Helping Australia Grow

Supplementing dry standing mature pasture for improved cattle and sheep performance

By Vincent Posada, B Sc, M Ag - Consulting Animal Nutritionist

The seasonal growth patterns of native and sub-tropical pastures generate wide fluctuations in quantity and quality. With adequate rainfall, a large bulk of feed high in nutritive value is produced, however as growth continues, progressively less energy becomes available to stock due to its decline in digestibility. Protein and mineral content decrease gradually and this drop is accelerated at flowering stage.

When seeds are formed, nutrients from within the plant cells migrate to form the seed heads and to increase the structure of reproductive stalks. The resulting dry standing pasture contains a large amount of fibre composed of cellulose, hemicellulose and lignin, and significantly lower levels of proteins that are mostly bound in the structure.

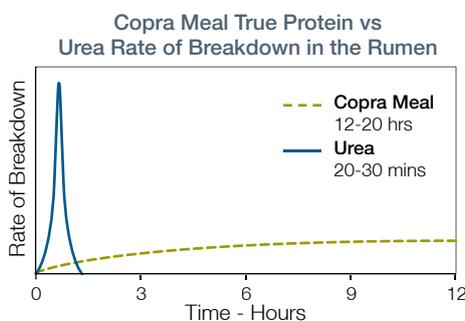
The fermentative end products of billions of bacteria, protozoa and fungi in the rumen provide most of the energy for cattle and sheep. These microbes and their enzymes break down the fibrous and non-fibrous parts of grass into organic compounds (volatile fatty acids) which are absorbed to provide energy as well as other nutrients to the animal.

For optimum growth and digestive activity, rumen microbes require adequate and constant amounts of protein and minerals such as calcium, phosphorus and sulphur in the diet. Because dry mature pasture is low in these nutrients, especially protein, microbial digestion slows down to the point that stock are unable to consume enough

pasture to obtain adequate nutrients to hold condition.

Fortunately, this trend can be reversed with protein supplementation. As protein is the most limiting factor to microbial growth, the ideal protein supplement should contain a source of slowly degradable rumen protein to stimulate rumen microbial reproduction and digestion.

Copra meal is recognised as having high protein rumen 'bypass' characteristics. In reality, the amount of copra meal protein degradation in the rumen is quite extensive due to the slow passage of the fermented mature forage out of the rumen. This means that



from the desk...

As the days are getting shorter and Winter approaches, pasture quality and the importance of livestock supplements is coming into focus for many graziers.

This time of the year also signals the launch of our annual MegaMin winter promotion, and we are proud to acknowledge John Deere's support again this year with six ride on mowers up for grabs. Another major focus for us, all year round, is looking for unique ways to bring practical information to you our customers. For the first time, we are excited to be putting on the AgSolutions Livestock Nutrition Roadshow

rumen microbes benefit for a number of hours after stock eat small amounts of copra meal.

Protein supplementation needs to be accompanied by a number of minerals to generate microbial growth and animal performance. For example, phosphorus is required by rumen microbes to conserve energy in a very critical molecule called ATP (adenosine triphosphate).

Sulphur can become the limiting nutrient for microbial reproduction because it forms a part of a group of amino acids that are produced by microbes to form proteins.

To ensure that minerals do not become a limiting factor, macro minerals such as calcium, magnesium and sodium and trace elements such as zinc, copper, iron, manganese, cobalt, iodine and selenium should be included in the supplement to cover part of the animal's daily requirement.

The goal is to provide a supplement with an adequate source of rumen degradable protein and the accompanying minerals for stock grazing dry mature standing pasture. Rumen microbes can now increase their numbers and digest more of the mature forage, liberating more energy per day. As a result, cattle and sheep can significantly increase feed intake and are likely to improve weight gain, reproduction, lactation and/or wool growth.

throughout Queensland and New South Wales. We also welcome another Field Advisor to our growing team, bringing our number up to seven advisors working with farms and rural stores to bring the very best solutions in soil remineralisation and animal nutrition.

We hope you enjoy this edition of our newsletter.

The AgSolutions Management Team



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Winter supplements No urea, no worries.

John and Ben Drynan and family "Gallanani"

The Drynan's have been running their cattle operation for four generations and made the change to MegaMin supplements in 2007 because it provided a broad range of minerals for their cattle at an economical price.

According to John Drynan, "Minerals are an integral part of our supplement program that we generally keep out all year round. Initially, we were feeding AgSolutions' minerals through summer and a 20% Urea supplement throughout winter. This was hard to manage for our 600 Charbray breeders as there were always the associated risks of feeding Urea supplements."

Last winter, John used MegaMin 50% Protein Meal for a line of young heifers at a cost of 17 cents/head per day which was similar to the cost of the urea based product previously used. Remaining stock were supplemented

with MegaMin 10% Protein Meal at a cost of approximately 8 cents/head per day... providing a significant reduction in costs.

Since using the MegaMin supplements, preg test results have revealed an increase in conception rates from 90 - 92% over the last two years. To have extra calves on the ground is significant because this helps to cover supplement costs as well as having a positive impact on overall profitability.

Intake of the MegaMin supplements varied with the cattle on the red sandy soils usually having a higher requirement of minerals compared to stock grazing the heavy soil country.

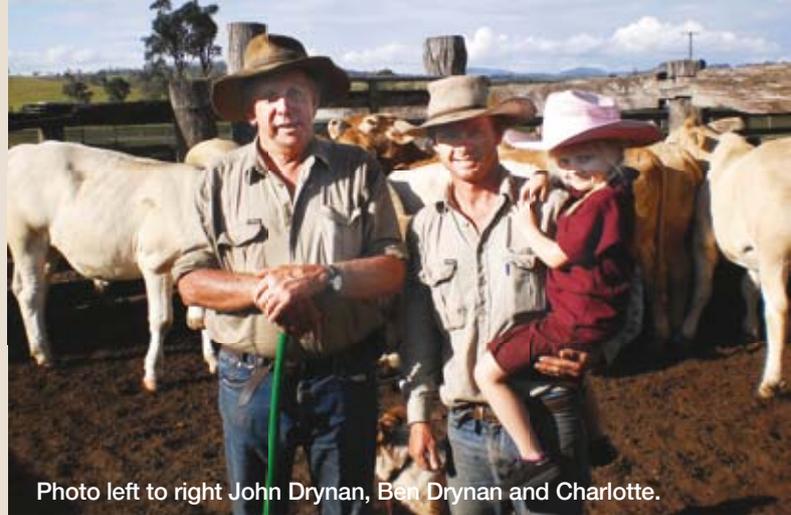


Photo left to right John Drynan, Ben Drynan and Charlotte.

"Our stock maintained great condition and I could relax because I knew that there was no risk of urea poisoning or associated problems if the cattle did run out of the MegaMin lick for a few days", reported John.

The Drynan's have also applied NatraMin mineral fertiliser to pastures and lucerne since 2005. John reports increased density in their pastures. The recent rain has been a relief for the Drynans and many others as we head into Winter.



Around the paddocks

By Gary Zerner, Senior Field Advisor

Are you growing pastures, hay/silage or cropping?

Then invest the next 90 seconds reading this for the sake of your soil.

In April 2010 it will be 6 years since I joined the team at AgSolutions. Back then, as the son of a 4th generation farmer, I knew the way of farming was a paradigm that was slowly beginning to change.

Over the past 6 years I've been on over 5,000 properties, taken over 1,000 soil tests and learnt more from you by seeing what works and what has created problems on our farms and in our soils.

AgSolutions has been growing for 21 years, from a vision and understanding of two people (Trevor and Wendy Zerner) to a family company with a team of around 30 members. Since late 2009 AgSolutions has grown in number by 6, with 3 additional field advisors in regional NSW and QLD servicing over 14,000 farmers. Why? There are many reasons;

- rising fertiliser prices and frustration with conventional fertilisers,

- declining results in the paddock,
- a better understanding of soil health,
- the 'organic carbon trend,
- declining soil structures,
- and because AgSolutions looks at more than just fertilisers.

In the next edition of our newsletter we'll feature the full story on how the Venz family have been able to halve their fertiliser bill while farming more country. At the same time they have reduced their fuel and tractor usage, reduced their irrigation and electricity usage and gained a better understanding of soil health and the importance of structure, biology and organic carbon.

For interest, where are the Venz's now?

Last month around 40 farmers attended a field day held at Beaudesert with the Venz family to look at how they have effectively improved their farming, become more sustainable and most importantly – more profitable.

Since first using NatraMin over 13 years ago as a fertiliser and soil amendment, combined

with legumes, aeration, grazing management, mulching, crop rotations and a reduction in the use of Nitrogen and chemical fertilisers, Rod and Robert Venz have become model farmers who are prepared to share their success story with anyone who'll listen.

I can't emphasise enough that AgSolutions promotes programs not just products. Those of you who have dealt with us will know that our approach looks as much at management, rotations, legumes, aeration, alternative nitrogen sources, soil structure and biology as well as nutritional requirements to grow a crop or pasture.

About 5 years ago we featured an article in this publication on the Venz family who continue to see the benefits in their soils with NatraMin as the catalyst in their overall program.

We must remineralise our soils, stimulate our soil's biology and improve the structure and carbon levels in our soils if the next generation is going to have any chance at overcoming the rising capital and input costs facing farmers in all of our farming sectors.

If you have any feedback, want a farm visit or soil test or have a success story to share, please call the AgSolutions team on 1800 81 57 57.

Livestock nutrition roadshow to provide industry support

The 2010 Livestock Nutrition Roadshow - a series of 12 seminars presented in towns throughout Queensland and New South Wales has been launched to allow farmers and graziers to come together and gain a deeper knowledge about the latest technologies and resources surrounding regenerative agriculture.

A major highlight for the 2010 Livestock Nutrition Roadshow is the announcement that one of Australia's foremost experts in practically-applied animal nutrition and pasture management, animal nutritionist Vincent Posada will be one of the keynote speakers. Vincent has over three decades of hands-on experience working in livestock nutrition and holds a Bachelor of Science degree, as well as a Masters degree in Agriculture. As an industry consultant, he currently provides advice and training to farmers, graziers, stockfeed

manufacturers and agribusinesses in Australia, North America and South East Asia.

AgSolutions Australia's senior field advisor and director of sales Gary Zerner, also one of the confirmed keynote speakers, said it was important to meet and work directly with local graziers and farmers to share intelligence, provide first-hand knowledge and information on best practices that would be practical for them to use on their farms.

"The rising pressure that has been placed on our farmers to provide higher quality produce was a clear indication that the industry was ready for an informative event, which is why we launched the roadshow series," Gary said.

"We are dedicated to helping farmers by providing useful information that they can take away with them to aid in animal nutrition and

pasture management, which in turn, ensures sustainable and long term outcomes for them," he said.

"There is an obvious need to supplement livestock to maintain condition or avoid losses during winter conditions," Gary explained. "However, not so obvious is the clinical or sub-clinical mineral deficiencies that can restrict animal performance during good seasons or periods of lush pasture growth. Minerals cannot be synthesised within animals, so providing livestock with adequate minerals can increase daily weight gain, body condition scores, and the feed efficiency in livestock during seasonal changes, on both native and improved pastures."

Included in the roadshow speaking agenda, are representatives from John Deere who will also be addressing the latest innovations in farming technologies to improve productivity in soil and livestock systems, pasture nutrition, animal health and livestock supplements.

did you know? **Natra** Min

The biological aspect of soil fertility can often be the limiting factor for crop and pasture growth. The biomass of microbes in healthy, living soil can amount to 4-5 tonne per hectare. With an estimated 60,000 different species of bacteria alone numbering in their billions per gram of soil, the importance of microbial activity can often be underestimated.

Soil microbes have numerous functions including:

- Fixing nitrogen from the air
- Increasing nutrient availability
- Improving soil structure
- Decomposing organic matter for humus production
- Assisting in disease suppression and protection

Research has shown that in many situations it is difficult to increase desirable populations of microbes by simply adding selected species to the soil. Because unfavourable conditions may be the reason for low microbe populations in the first place, it is obviously important to address factors that deplete soil microbes in addition to implementing a program to maximise microbe activity.

The key to 'farming microbes' is to provide a balanced environment for their function and survival. Minerals, mulch, moisture and air are essential for microbes to thrive.

The NatraMin range provides broad spectrum minerals and contains a specifically formulated bio-stimulant to enhance both microbe and worm activity in your soil. When used in a program that also addresses other factors such as organic matter and aeration, NatraMin can assist in creating this environment for increased Biological Fertility in your soil.

Talk to one of our Field Advisors today on how to get started on a program to improve all aspects of your soil fertility.

did you know? **Mega** Min

At various times of the year you may notice your livestock eating or 'craving' certain things including dirt, bark on trees or other weird things around your sheds and property. When stock are chewing bark on trees it generally means one of two things; either there is lush feed around and they are chasing fibre or they are chasing minerals that are contained within the tree bark.

Stock will also lick dirt at certain times or sometimes all year round. This is also associated with chasing minerals with salt being one of the main elements that stock are able to detect. Stock will also lick dirt as a means to assist in buffering their gut or rumen.

AgSolutions MegaMin supplements have been shown in University trials to assist with buffering the rumen of cattle in feedlots while supplying key minerals at the same time. MegaMin Lick Blocks and Loose Supplements are designed to provide one of the widest ranges of minerals and trace minerals in a supplement that is safe for all livestock including horses.

Mineral 'cravings' and intake will vary from property to property and even paddock to paddock, depending on the animal, available feed and source of water. Livestock in lighter, leaching soils and coastal areas will often consume more MegaMin supplements after rain or a flush of feed, while other areas may reduce or go away from the minerals after rain. Keeping one of the MegaMin products out all year is a way of detecting your livestock's requirements and it may also prevent periods of 'craving'.

Contact AgSolutions' Field Advisors on 1800 81 57 57 to learn more.



Evidence of mineral craving.

Mega Min

BUY MEGAMIN AND WIN

SIX John Deere Ride on Mowers up for Grabs

Valued at \$3,490 rrp each



How to be in the draw

To be in the draw, simply purchase any of the MegaMin products in the listed quantities.

MegaMin Loose Supplement

5 x 20kg = 1 entry | 1 x 1t BB = 10 entries

MegaMin Lick Blocks

5 x 17kg = 1 entry | 1 x 75kg = 1 entry

Complete 1 entry per transaction.
Closes 31.08.10 | Drawn 17.09.10

Our newest Field Advisor – Paul Pritchard



AgSolutions Australia would like to welcome our newest field advisor Paul Pritchard to our team. Paul will service the Darling Downs and Gatton regions of Queensland.

Paul was born and raised on the plains in South Australia on the edge of the Barossa Valley. He has a keen interest in animal production and agriculture having completed a Degree in Agriculture at the University of Adelaide and started his career off in stud cattle breeding in the South East corner of SA.

After working in the grain industry for SGS Australia, providing quality assurance services and promoting soil and plant tissue tests, Paul then joined one of Australia's leading animal health companies developing his technical skills and understanding in agriculture.

Paul then joined Silvan Sprayers as a field advisor and state manager, spending eleven years with the company progressing to National Product Manager for Viticulture.

Working with family Paul developed an irrigated 10,000 tree olive orchard on the edge of the Barossa Valley from scratch to fourth year production, and then two years ago he moved to the Darling Downs, joining AgSolutions in February of this year.

Paul values community, family and sustainable land management. He lives in Warwick with his son James and they are both keen polocrosse players, with a passion for training horses and competing in an active team sport that can involve the whole family. With a broad background in agriculture from cropping, irrigation, horticulture and animal production, Paul has quickly become an active and valuable member of the AgSolutions team, priding himself on providing honest and professional guidance. Don't hesitate to contact Paul for a discussion on your soil regeneration and animal nutritional requirements.

2010 LIVESTOCK NUTRITION ROADSHOW



AGSOLUTIONS AUSTRALIA IS PLEASED TO ANNOUNCE THE 2010 LIVESTOCK NUTRITION ROADSHOW, COMING TO A TOWN NEAR YOU.

The seminars will cover strategies to improve herd profitability through enhanced techniques in livestock nutritional management.

KEY NOTE SPEAKERS

Mr Vincent Posada [Animal Nutritionist]

Mr Gary Zerner [Senior Field Advisor]

LATEST INNOVATIONS IN FARMING TECHNOLOGIES TO IMPROVE PRODUCTIVITY ON YOUR FARM

PROUDLY SUPPORTED BY  **JOHN DEERE**

Tickets are \$25 per head. Invite a friend and pay only \$20 each. Breakfast, lunch or dinner will be provided plus tea and coffee.

Call AgSolutions for more information regarding seminar venues and times.

PLACES ARE LIMITED. DON'T DELAY.

Call AgSolutions on **1800 81 57 57** to book your seats.

MONTH	DATE	TOWN
APRIL	14	Grafton
	15	Glen Innes
MAY	27	Warwick
	27	Armidale
	28	Tenterfield
JUNE	02	Gympie
	03	Maryborough
	22	Gloucester
	22	Scone
	23	Tamworth
JULY	08	Texas
	08	Dalby

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FEEDBACK

We understand that our customers are an important part of our company, which is why we always look forward to hearing from you. If you have any feedback, suggestions, questions or personal stories you would like to share with us, please give us a call or send us an email. You might even star in our next publication!

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