CB Farming News

FEBRUARY 2012 PUSHING THE BOUNDARIES ISSUE ONE

Pivot irrigated Soy bean crops in Tongala, left and centre, and flood irrigated beans in Katamatite, right.

Welcome to our 1st edition of CB Farming News 2012

I trust that everyone had a happy and safe new year and are as excited about the coming season as we are at CB Farming Systems.

As some of you will know, the reason I say we is because our workforce has doubled since our last newsletter. As the requirements of growers has increased, so has the need to expand and provide a better service to growers. Therefore, as of the 16th of January, we now have a new graduate agronomist, Craig Emmett.

Craig is a recent graduate from the University of Melbourne's Bachelor of Agriculture degree. He studied at both the Parkville and Dookie campus's and has a particular interest in pasture based grazing systems, having grown up on a Dairy from in Stanhope VIC.

New Office-

In addition to an expanding workforce, CB Farming now has a new office front. Located at 9 Mundarra Rd Echuca, the new office has been up and functioning since late January, and is quickly becoming a beehive of excitement. The new office is now not only home to CB Farming, but also Mark Emonson's Malijo consultancy and Courtney and Mal McCloud from Five Star stockfeeds. As many of our Dairy clients will know, Mark is a leading Dairy nutritionist and is a valuable tool to our business, as he can help us to better meet and understand animals nutritional needs. The newsletter will hopefully now feature a regular piece from Mark on Animal health and nutrition.

Soy bean plantings have quadrupled in Southern NSW and Northern Victoria this season.

Soy Beans-

As many of our growers know, Soy beans are becoming a popular alternative summer cropping option. Soy beans are a relatively low cost crop to grow, with a good gross margin on return, especially when compared to other summer cropping alternatives such as maize. When growing soy, there are a number of keys factors which are detrimental to achieving a good return. Establishment is critical, which is closely related to irrigation intervals, as well as chemical use for weed and pest control. If any of these factors are mismanaged, it can result in serious yield losses.

Irrigation intervals are critical when establishing soy. This crop was sown too long after its pre-irrigation.

Maize Ear worm-

Maize ear worm has been a prevalent pest in virtually all maize crops in the district. While it is a difficult pest to manage, it pays to keep up regular inspections on your maize crop to watch for infestations. As the photo below

demonstrates, they can cause significant yield losses if left un-treated. The earlier they are found and treated , the better chance of minimizing yield losses.

Calcium- the forgotten nutrient

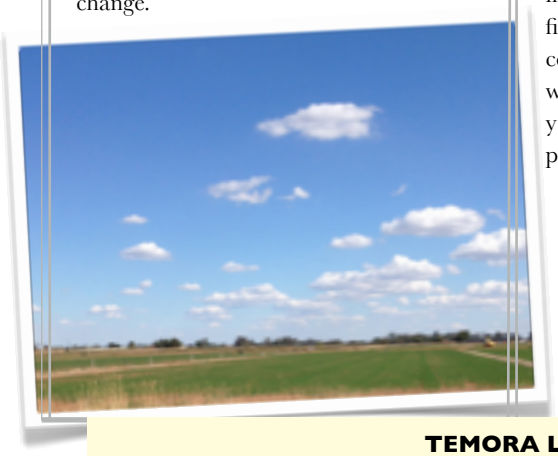
When it comes to growing crops, the two most often mentioned nutrients are Nitrogen and Phosphorous. While these nutrients are extremely important and can be limiting factors to optimal plant growth, it is calcium which can determine how freely available these nutrients are in the soil. If calcium levels are deficient in the soil, organic N levels are lower and P is often not readily available for plants to uptake. This is why restoring calcium levels in the soil is often the first thing that we will concentrate on farms. Once calcium levels are improved to more desirable levels, nutrients like N and P become more readily available in the soil. This is because soils require calcium to be able to cycle properly, which in turn creates more organically available nutrients, reducing demand on fertilizers.

We have been seeing some very good results from such practices. For example, these photos on the right were taken on Col's most recent trip to the Northern Territory. The right hand side of the photo has been receiving calcium for the last three years, while the left has not. As the expression goes, a picture tells a thousand words. The soil at the property lacked structure and was dispersive, so the water didn't infiltrate the soil and germinate the seed. When calcium was added, the soil began to flocculate, giving it structure, meaning the water was able to penetrate the soil and achieves better germinations, as the soil is now able to retain moisture.

Lucerne in January.

Despite popular believe, it is possible to establish Lucerne any time of the year. Like most things, it just comes down to timing and good organization. Getting a good strike of Lucerne simply comes down to soil temperature at germination. We have had a number of successful strikes of Lucerne this summer, with growers in Tongala, Nathalia and Murrabit all successfully getting Lucerne to grow. The key to this practice is timing. That is, waiting for a cool change, having

the paddock prepped and ready for the seed to go out and having the water ordered for when the change is due to arrive. The photo below was taken in Tongala and is testament to this practice, the reason for us pushing these limits is that while we have water we need to grow as much high quality feed as quickly as we can making the most of the water. This paddock was sown and irrigated just after new years on the back of a cool change.



Mark's Mumble- Are your animals reaching the performance potential?

As mentioned earlier, Mark Emonson is a leading animal nutritionist, in particular, ruminant animals. For the first edition of Mark's Mumble, he has come up with a few simple question which can help you determine whether your animals are meeting their performance potential.

1. Are your cows eating 3.5 tone gross/year? (green feed)

2. Are your cows eating 1 t DM of other fodder?

3. cow should do 630+ kg of solids/ year.

4. a) Do your cows do 230 litres for every 1 litre at peak production? e.g. if peak production is 32 litres, they should be able to produce 7360 Litres/year (32*230).

4. b) Is your Fat/Protein ratio greater than 0.82:1?

5. Are your sheep gaining greater than 300g/hd/day?

6. Do your animals stay alive? What is your mortality rate?

These are just a few simple questions that can give you a rough indiction whether your animals are reaching their production potential. If you think that your animals are under preforming, feel free to contact Mark on 0448 625 456 and he'll be happy to have a chat.

TEMORA LIQUID FERT TRIAL UPFRONT TRIAL 2012

CS Red less Mn UAN	Injected Injected	30L/ha 50L/ha	3.69T/ha	210,700mg soluble Ca
Map CS Pasture less Mn UAN	drilled injected injected	20kg/ha 20L/ha 40L/ha	3.46T/ha	182,000mg soluble Ca
CS Red less Mn Bio N	injected Injected	30L/ha 40L/ha	3.60T/ha	210,700mg soluble Ca
Map Calsap UAN	drilled injected injected	40kg/ha 10L/ha 40L/ha	4.07T/ha	170,000mg soluble Ca
Map Calx UAN	drilled injected injected	40kg/ha 10L/ha 40L/ha	4.28T/ha	350,000mg soluble Ca
Untreated Control	-	-	3.07T/ha	
Phos Acid UAN Calsap Zinc Sulphate	injected Injected injected injected	10 30 10 1	3.04T/ha	Not recommended as it is believed the reactions between the Calsap and Phos Acid were too aggressive

*The Above reps are of the upfront Nitrogen trials at Temora with no post N which except the Calsap one we did see a pretty close link to the amount of soluble Calcium going out. Calsap does have a similar total Calcium to Calx as there are many insoluble solids that would've broken down. All reps had similar units of N and as comparing types of P its hard to draw too many conclusions except stay away from phos Acid. There were some soil type variation which need to be considered which is why the trial will be run over a number of years .

TEMORA TRIAL POST NITROGEN REPS 2012

Map Urea	upfront GS 32	60kg/ha 75kg/ha	3.95T/ha
Map CS Pasture less Mn UAN	upfront GS 13 GS 13	20kg/ha 20L/ha 40L/ha	4.21T/ha
Map Tracer Copper Tracer Zinc Urea	upfront upfront upfront GS 32	50kg/ha 2L/ha 2L/ha 75kg/ha	3.57T/ha

**All costs where close to identical, lime will be placed on granular trial plots*

*On the post N apps timing of the application seemed to make a bigger difference then anything, if you got apps on just after that dry period after sowing we saw highest efficiency. Also the difference between the two Urea plots would make you presume some variance you will see in all trials, trends will need be analyzed over a number of years.