VICKERY BROS.
THE FERTILISER PROFESSIONALS

December 2009

Early Delivery Incentive

Save **$16/t** off the price of super for delivery in December 09.

Save **$12/t** off the price of super for delivery in January 2010.

Save **$6/t** off the price of super for delivery in February 2010.

Contact the Coleraine office on 5575 2777

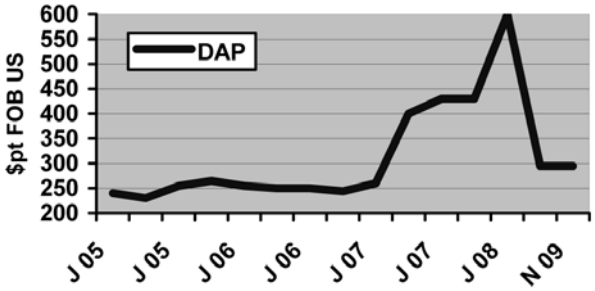
OVERVIEW

By Geoff Robertson

Fertiliser pricing 2010

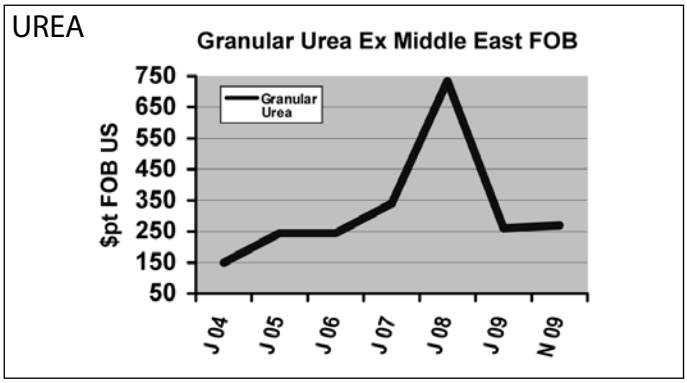
Over the last six months global prices for most fertiliser products have returned to more traditional levels. Domestic pricing for the coming season will therefore hinge on global demand, current inventory levels and the Aussie dollar.

DAP



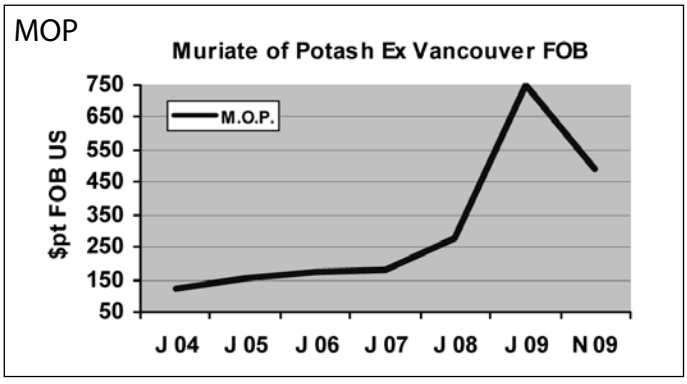
Traditionally global demand is low for ammonium phosphates at this time of year; falling prices have seen buyers wary about committing tonnage too far ahead of use. On the supply side as prices have fallen to close to cost of production levels, manufactures have allowed inventory levels to run down and prices therefore appear to have bottomed. Global demand increases in the New Year as India comes back into the market and given low inventory levels prices will begin to increase. Domestically Australian importers have to start setting boats to ensure adequate supply for the coming season but are wary about going too early and losing some price advantage if the dollar continues to move upwards. It will be interesting given all fertiliser companies have suffered heavy losses in the last twelve months by carrying too much stock as to how much fertiliser will be bought into the country this year. Given these factors we expect that the price of phosphates has bottomed and given a stable dollar DAP and MAP prices will begin to trend up domestically by March.

UREA



Urea demand in the southern pastures and cropping markets of Australia is obviously low at this time of year. The coming seasons urea prices will be dictated by the strength of the dollar over the February March period. Unless world energy costs increase dramatically urea domestically should maintain its current levels.

MOP



Potash prices have reduced globally but a consolidation of manufacturing will prevent the falls that DAP, MAP and urea has experienced. Import contracts for the next six months are being set now and the expectation is that potassium prices domestically will continue to ease over the next three weeks.

STOP PRESS: GLOBAL DAP AND MAP PRICES HAVE INCREASED BY 7% IN THE LAST WEEK OF NOVEMBER.

Early delivery incentives:

The last three years of reduced fertiliser application rates are now showing up in lower soil test results particularly with regard to potassium and copper.

A return to more normal pricing and with a reasonable finish to this years growing season we are expecting an increase in fertiliser use for 2010. To assist us in meeting the demands of increased tonnages and to prevent the bottle neck to supply in March and April we are offering price incentives for delivery and spreading of fertiliser in December and January matched with payment terms to suit individual cash flows.

Contact Bill, Harry, James, Kate or the Coleraine office on 03 55752777 for details.

MOLYBDENUM FOR HEALTHY CLOVER

By Harry Armstrong

Molybdenum is the most commonly detected trace element deficiency we encounter here in south west Victorian pastures. Molybdenum plays a vital role in legume based pastures. Clover based pastures with low molybdenum levels can either fail to nodulate at all, or nodulate very poorly. So why is it important to have healthy nodules on the roots of legumes? Because the nodules contain bacteria known as rhizobia that enable the plant to extract nitrogen from the atmosphere and fix it in the soil. This process is known as nitrogen fixation. Recent research work done locally at DPI Hamilton looking at cereal clover rotations indicate healthy pure stands of sub clover can fix the equivalent of 250kg/ha of nitrogen in the soil. That is the equivalent of 500kg/ha of urea!

Poor clover growth is often the first sign of moly deficiency. However legumes growing in soils that are low in major nutrients such as phosphorus, potassium and sulphur will have similar symptoms. Clover content in pastures is also influenced by other factors such as grazing and weed management. So we need to investigate and if possible rectify any other issues before we jump to conclusions regarding trace elements. Major nutrient problems such as phosphorus and potassium can be checked with a simple soil test. Trace element or micro nutrient status of a pasture can only be measured with a tissue test usually taken in spring.

Interactions between moly and copper are well understood. While low moly levels result in poor growth of legumes, excess moly in relation to the copper levels in clover can have implications for stock health and animal performance. An extreme example would be pastures grown on peat soils which usually contain excess levels of moly and less than adequate copper levels. Animals grazing these pastures will rapidly develop clinical signs of copper deficiency. This is not so much caused by the low copper levels in the plants but by the excess moly making the copper unavailable to the animals. Applying copper to these soils will usually not fix the problem as the very high moly will still prevent animals absorbing sufficient copper. Administering copper directly to the livestock is usually the preferred option on these soils. While the copper/moly antagonism that exists on peat soils has a drastic effect on livestock production, less dramatic but equally damaging losses could well go undetected on non peat soils.

Other trace elements are also measured with tissue analysis. These include cobalt and selenium which, like copper, influence animal performance more than they do pasture growth. Veterinarians can advise on blood sampling of livestock to measure these trace elements if required.

Indicative trace element costs at maximum application rates

ELEMENT	Kg/ha	$/ha
Moly	0.06	19.01
Copper	1.0	25.21
Cobolt	0.03	16.25
Selenium	0.01	14.11
Zinc	1.08	14.22
Boron	0.9	17.57

Multiple trace element blends are cheaper as blending cost is apportioned to a greater number of products.

Lime spread on pastures can temporarily elevate moly levels and care should be taken if lime is to be applied to pastures that have recently had moly applied.

Tissue sampling costs are virtually the same as for soil tests. I'm sure if you were to do a cost / benefit analysis there would be few activities that would stack up better than a well thought out and regular soil and tissue testing program.

SOIL AND TISSUE TESTS

By Harry Armstrong

The big jump in fertiliser prices we were confronted with last season shook us all up a little. Responses varied from "forget it, it's too expensive", "we'll only do the good pastures", "we can't afford not to apply it", "and I'll put lime on instead". Some responses we can't print!

Now the dust has settled and we recognise that fertiliser prices will be more volatile in the future, the most common response seems to be "let's get a bit better grip on what we are doing regarding fertiliser". In many cases that has lead to us soil testing paddocks and farms that have not been tested for a very long time (in some cases never).

Phosphorus (P) levels were no great surprise on most properties. P levels can be estimated with some degree of accuracy if the stocking rate, soil type and fertiliser history are known.

The surprises came in the potassium (K) levels. Beef sheep operations generally speaking require an Olson P of around 15mg/kg and K levels above 150mg/kg. A number of farms we tested had very good P levels, reflecting a good history of superphosphate applications, but distressingly low K levels. It was not unusual to find Olson P levels above 20mg/kg but potassium (K) levels below 40mg/kg. To look at these pastures without the soil test information, you would assume they were in need of a full renovation. Clover almost nonexistent and perennial grasses struggling against low fertility weeds such as onion grass. But in reality all they require is some potassium (K) applied, either in the form of Super Potash 1:1 or perhaps even straight potassium (MOP). Perennial grasses may need to be reintroduced at some stage if they have fallen to sub optimal levels, but initially at least all that is required is some potash.

A simple and cost effective soil and tissue testing program can detect and enable producers to avoid the situation of nutrients levels falling to profit robbing levels.

KEEPING COSTS LOW & PRODUCTION HIGH

By Kate Shaw

Eddie and Lisa Dwyer have "had a real crack" in the last few years. Eddie and Lisa have been on their 153 hectare (136 hectare effective milking area) Macarthur property for the last five years. Spring two years ago they purchased a further 104 hectare property and last spring they added to this an adjoining 82 hectares to take their total holding to 339 hectares. Their two new properties totalling 186 hectares are located a short distance from their home block and it is this outblock that they use for grazing dry and young stock and for fodder production.

Both properties making up the outblock were largely unimproved when purchased. The first block acquired had low production pastures comprising largely of onion grass, fog grass, toad rush and flat weed with very little preferred pasture species present. The second block purchased had been sown to improved pasture species as part of a cropping program in the years leading up to the Dwyer's acquisition but the grazing management meant that weeds were invading.

Monitoring soils

Upon purchasing the two properties soil tests were undertaken. The first block had average Olsen P levels of 7 and the second property had average Olsen P levels of 11. Both properties had variable sub optimal potassium and sulphur levels. The Dwyer's recognised that they were "hamstrung by the fertility" of the soil if they were to improve the pastures on the place. The decision was made that to meet the production levels required of the property capital applications of nutrient was needed.

Eddie and Lisa aim to improve the outblock to be comparable to their home farm within the next three years. They aim is to achieve average Olsen P levels of 20. In 2008 the Dwyer's applied capital applications of nutrient and have since built their Olsen P levels to 13 on most of the outblock. The option to run a dairy on this block in the future is also being considered once the property has been sufficiently improved.

By soil and tissue testing the Dwyer's were able to strategically apply the right nutrient at the right rate over different parts of the property. It has also allowed them to monitor the nutrient status of their soils in line with their fertiliser program. Eddie identifies soil testing as being able to "refine the decision making process" and thereby effectively allocate expenditure. They further plan to improve their understanding of their soil fertility status by undertaking a Nutrient Management Action Plan in association with WestVic Dairy and Glenelg Hopkins CMA.

When milk prices dropped this year the decision was made to apply a maintenance application of fertiliser on their outblock. Rather than not apply fertiliser and go backwards in fertility they have chosen to tread water and consequently be in position to take advantage of the eventual rise in milk prices.

Pastures

As part of the pasture improvement program the Dwyer's have been sowing annual pasture species to aid in weed control. To tackle the significant onion grass problem they have chosen not to spray but to instead improve soil fertility, resow competitive pasture species and effectively graze to bring it under control. Positive results have been achieved. They have now sown the greater part of the block to perennial ryegrass varieties including Banquet, Avalon and Matrix.

Fodder production on the outblock plays a crucial role in the overall production of the farm. Whilst also used to run dry stock and opportunistically bought in cattle its main role is to supply fodder to the milking herd on the home farm. As such all fodder is cut and carried to the home farm resulting in a significant export of nutrient in the form of hay and silage. The Dwyer's believe that a short lock up period for silage production suits them well. This allows them to utilise more grass before lock up and after harvest and to produce good quality silage not a bulky poor quality product. A prescription fertiliser blend is applied to ensure a quality product is made.

There has been a significant improvement in silage and hay production since the fertility of the property has been increased. The Dwyer's estimate a 50% improvement in yield per hectare this year in comparison to last year. They envisage they will utilise cereals more in the future for hay production after they sowed a paddock to triticale this year and had wonderful results despite very wet conditions. By moving away from annual ryegrasses to cereals for fodder production the Dwyer's expect even better yields of fodder into the future.

Production and profit

Although there is an emphasis on production it is ultimately profit that drives the Dwyer's. Having expanded their operation significantly they identify the need to make every dollar spent return them a profit. As Lisa comments, its milk in the vat that makes them money. As such optimising production is crucial.

At present they are milking 240 cows and are achieving an average of 530 kilograms of milk solids per cow. Since purchasing the outblock they have raised their milk solid production by 100 kilograms and hope to raise production by a further 50 kilograms per cow. This projected increase is based on the utilisation of fodder produced on the outblock and the increase of grain supplement by a ¼ tonne. They also plan to increase their milking herd size with time. At present they base their production on between 80-90% grass and the balance supplements.

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Benchmarking

continued from page 3

The Dwyer's have utilised benchmarking to monitor and improve their production. Eddie believes that you need to "benchmark against the best not the average otherwise you stay average". Through benchmarking it has been identified that their production figures stack up extremely well against their feed supplementation (both in and out of the bale) and their nitrogen use. This means that they are able to grow and utilise their pastures efficiently. They attribute part of their knowledge of efficient pasture production to participating in a Feeding Pastures for Profit course.

Their production philosophy is not to have the highest yield but the most profit. Optimum is the key not maximum. Similarly their optimum Olsen P level they believe to be in the low to mid 20's and cannot justify levels above this based on the law of diminishing returns.

Eddie and Lisa recognise the need to keep costs low and production high to make a profit. By utilising the resources available to them such as production figures, benchmarking, and soil and tissue testing they are able to identify, quantify and justify decisions and their results to continue to be profitable into the future.

SIGNIFICANCE OF POTASH

By Bill Feely

The amount of potash (K) that is removed from farming enterprises is variable depending on what type of enterprise it is, but none the less it is significant. Depletion of K levels is a common occurrence in most farming enterprises particularly dairying, horticulture and also pasture through heavy cuts of silage and hay. Failure to replace the amounts removed will have a significant effect on future pasture production. The simplest method of monitoring this is to regularly soil and tissue test.

How much K should be used is a moot point and relates to the enterprise. There are basically two views in relation to how much K should be used. The first view is the economic rationalist stand and they want to know if by applying a nutrient will more pasture be grown and if it will, what type of response will it be. As a result of this and knowing the costs and benefits, the most profitable rate at which to apply the nutrient can be calculated. If the soil can supply the nutrient then they are happy to let it, taking no action until the soil reserves are depleted, as a result of this, pasture composition and production losses become significant. Potash is a classic example of this.

Most of our heavier soils have adequate levels of K until we started to farm intensively (silage, hay, dairy, and highly stocked beef / sheep) then deficiencies occurred and corrective action had to be taken. In many instances this has been too late. Practices such as no rotation, continuous cutting of the same paddocks for silage and hay plus not monitoring the nutrient levels will see K levels drop dramatically.

Nutrient removal Kg/Ha

PRODUCT *kg/ha/removed*	Phosphorus	Potash	Sulfur	Calcium
Pasture hay *(1tonne)*	3.0	15.0	2.0	9.0
Wool *(5kg greasy)*	0.02	0.1	0.2	0.0
Meat *(50 kg lwt)*	0.7	0.2	0.4	0.0
Milk *(1000 l)*	1.0	1.04	0.6	1.0

Alternatively there is the other point of view and that is the replacers who replace what nutrients are taken out. Above is a table that should be used as a guide to planning a fertiliser program. It outlines nutrients such as potash, sulfur, phosphorus and calcium kg removed in farm products.

Cropping

Potash is sometimes over looked in cropping situations and I believe some croppers have been slowly mining the K levels of even the most fertile soils. There are several ways by which the K content of a cropped soil is depleted and these include:

- Removal of K in harvested grain or hay.
- Loss of K in eroded soils and leaching of K below the root zone.
- In most cases the removal of K in harvested produce has had the greatest impact on soil K reserves.

CROP	K (potash) *Kg removed/tonne of grain*	K (potash) *Kg removed/tonne of hay*
Wheat/barley/oats	4.0	12.0
Canola	9.0	
Lupins	8.0	

(Source: Australian Soil Fertility Manual)

Dairy

In a dairy the amount of K required will be dependent on soil type, stocking rate, paddock history and location of the paddock on the farm. Based on this night paddocks usually require no K as opposed to paddocks that are furthest from the dairy, where depending on soil type and paddock history could require up to 120 units of K/annum. The history of the paddock refers in general to not only grazing but the cutting of silage and hay. Removal or transfer of hay and silage will have a significant effect on the K status of dairy paddocks and may be as high 100 kg K/ha for a single crop.

Therefore subject to soil test levels of K a general rule of thumb in the South West could be:

- Light textured soils ie sand/sandy loam K levels <100mg/kg would be looking at maintenance of 100kg/Ha for the year minimum. This is also dependent on stocking rate if the stocking rate was high ie 3 cows /ha then the 100 would barely be maintenance.
- Loam soils with K levels at 100-150mg/kg maintenance would be 80-100kg of K/annum again dependent on stocking rate.
- Loam/clay loam 150–200mg/kg maintenance would be 60-80kg of K/annum stocking rate dependent if stocked at 3 cows/ha then would look at maintenance 80-100kg of K/annum.
- Clayey type soils with K 300mg/kg plus, we would not consider using K.

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Irrigation

Irrigation would again be dependent on soil type, fertiliser history, nutrient levels and stocking rate but would look at a minimum of 100kg of K/annum given usually high stocking rates. Lighter type soils would warrant at least 120kg of K/annum. Heavier clay type soils would require substantially less K if any at all, in fact some irrigation water has reasonable levels of K naturally.

Beef - Sheep

In pasture enterprises where K is needed as in accordance to soil test recommendations an application of 25-30kg/ha/annum would be standard. Due to the high price of K the decision then reverts back to the economic rationalist versus replacer scenario. Is it viable to do so? I think the answer to this question then becomes a decision based on whether the pasture composition is sufficient enough to warrant the cost of applying K. If a paddock has been sown down and has a solid grass/legume base then I would have no hesitation in applying it.

As with other production systems, K can be lost from pastures by leaching, runoff or by soil fixation. These losses can be minimised by careful selection of rate and time of fertiliser application. The split application of potassium can improve spring production compared with a one off autumn application, better matching the plants seasonal requirements. Products with different release rates of K can also reduce losses due to leaching and run off.

In the field species indicators of K deficiency can include Sorrel, Flatweed, Sweet Vernal and Fog Grass. The lack of vigourous clover growth in low K pastures allow these and other undesirable weeds to invade and flourish.

The hardest decision regarding K is whether or not it is affordable. Whether you take the economic rationalist viewpoint or that of the replacer, the decision will be based on a choice between mining or replacing the nutrients. The immediate reaction to the cost of applying K is to not put it out but I think in the long run this a big mistake. Depleting marginal K levels will only be exacerbating the situation as it is a long way back. Irrespective of the farming enterprise the failure to monitor and address K use accordingly will have detrimental effects on future production.

Grain Storage

Vickery Bros. currently still have 50t and 100t silos available at Coleraine for grain storage for the 2009/2010 harvest.

If you require storage for this upcoming harvest please contact Jake at the Coleraine office on 55752777.

GYPSUM FOR DIFFICULT SOILS

By James Stewart

Gypsum is a soil conditioner and like lime has a number of benefits in agricultural production. Some of these benefits have been known for centuries, while recent research has found new benefits to gypsum use.

Gypsum is made up of two main nutrients, calcium and sulphur. Calcium can be supplied in several ways. Because most calcium deficient soils are usually acidic, lime is often the most cost effective product to apply calcium.

Gypsum can be used to supply calcium in situations where soil pH is high enough not to need lime.

The other main element of gypsum, sulphur, is taken up by plants in the sulphate form. Most sulphur sources in fertiliser are in sulphate form and gypsum in some situations can be the cheapest form of sulphur available.

Sulfur is part of every living cell and makes up 3 of the 21 amino acids which form proteins. The need for sulphur is closely related to the amount of nitrogen available to crop plants.

Response of canola to both nitrogen and sulfur.

Rate of fertiliser kg/ha		Yield t/ha	Oil %	Protein %
N	S			
80	0	1.03	34.6	30.9
80	10	1.73	41.1	32.2
160	10	1.39	38.6	31.4
80	40	2.15	43.4	33.3
160	40	2.19	43.3	34.0

This close relationship should not be surprising, since both are constituents of proteins and are essential with chlorophyll formation. The table below shows how nitrogen and sulphur supplies affected yield and oil content of canola - proving that sulphur increases nitrogen efficiency in crops.

Sulfur is also essential for nitrogen fixation by legumes.

Soil organic matter is the primary soil sulfur source. More than 95% of the sulfur found in the soil is tied up in organic matter. The amount of sulfur deficiency is increasing in our region. There are several factors that are contributing to this including:-

- The availability of crop varieties with higher yields.
- The increased use of high analysis fertilisers containing little or no sulfur.

Calcium and sulfur are not the only benefits of gypsum – it can decrease the swelling of clay soils. This in turn increases water infiltration and improves soil structure.

Rain water has low amounts of electrolytes. As a result soil particles will tend to swell and this causes repulsion between soil particles. The addition of gypsum increases the bonds between soil particles and soil integration.

The other benefit of gypsum is it can offset ill effects of irrigation water, rising water tables and amend sodium affected soils. Sodium chloride is the major offender in the development of saline soils in Australia. The application of gypsum helps the exchange of calcium from the sodium affected soil particles.

If any of the issues mentioned in this article ring any bells on your farm, now is the time to start organising your gypsum requirements for the coming season.

CROPPING OVERVIEW

By James Stewart

Don't forget copper and zinc

As we come to the end of another growing season, I look back and think about the issues that confronted us. Some have been out of our control while others can and have been rectified quite easily.

The problem that was staring us all in the face was the deficiency of zinc and especially copper in cereals. In my experience, copper has not stood out so obviously before this year. Nearly every tissue test I did and most crops I monitored showed copper and zinc as the main trace elements lacking.

Copper and zinc are two of eight trace elements nutrients essential for plant growth and reproduction. Copper is necessary for chlorophyll formation in plants. Chlorophyll is the green colouring matter of leaves and stems of plants. Chlorophyll is essential to the production of carbohydrates by photosynthesis.

Seventy percent of the copper in plants is found in the chlorophyll. Plants well supplied with copper have stronger cell walls, higher polymers and proteins are formed and consequently are more resistant to fungal attacks. Copper is also involved with enzyme processes meaning digesting certain organic substances to produce proteins, eg. grain production.

While zinc is involved in synthesis (combining) of plant growth substances like copper, zinc is also involved in enzyme systems, the production of chlorophyll and carbohydrates. Zinc is very important early in the plants life cycle.

As we reached mid to late August this year, the country got wet, very wet. This emphasised the copper and zinc deficiency. Due to water logging, plant root growth was slowed or stopped. This poor root exploration of the soil made it difficult for plants to take up enough copper and zinc to supply the upper parts of the plant. This problem was then made worse by not being able to access paddocks with boom sprays to address the matter with a foliar spray.

Clients that used copper and zinc coated high analysis cropping fertiliser didn't run into as big a deficiency issue and weren't solely reliant on tyring to get a foliar spray out when paddocks were too wet.

As we continue to crop in a high rainfall zone compared to traditional lower rainfall grain growing areas we are removing double the amount of grain most years if not more. Therefore we are removing double the nutrients required in growing yields we have the potential to achieve.

For example, the district average season rainfall this year was just under 400ml, minus evaporation at 110ml, leaving 290ml total. With these figures and not having been waterlogged, cereals should yield around 5t/ha, while the canola calculation works out at around 2.5t/ha. At these rates of grain removal for cereals (not including stubble) copper removal works out to be 20g per hectare while zinc is removed at up to 100g per hectare. Add to this a low starting base in the soil of these trace elements and make it worse again that country that has been cropped for a couple of years and you are bound to run into trouble.

Sowing with copper and zinc down the tube has the nutrients right underneath the plant. This promotes better plant vigour as it can be utilised right from early germination. There is also no need to worry about getting foliar sprays out when it gets wet. And by the time you can get on to spray, it may be showing deficiencies (like this year) meaning some damage (yield loss) has already occurred.

CANOLA RESPONSE TO PHOSPHORUS

Canola trial plot showing where no fertiliser was used at sowing. Crop on outside of photo was sown with 120Kg/Ha of MAP.

This is virgin cropping ground just bedded this season. Soil test showed Olsen P of 8.

Unless the deficiency is severe, crops will look normal and their deficiency will go unnoticed (unless a tissue test is done) which will lead to yield reductions.

Planning is very important with trace element applications. It's a good idea to keep paddock history records e.g crop/pasture rotations, fertiliser history, and yield removal or yield maps from harvesting.

Good luck to all for harvest, lets hope for some grain price increases and I look forward to catching up early in the new year for some more soil testing.

NUTRIENTS FOR SOIL HEALTH

By Geoff Robertson

The aim of a good soil fertility program is to ensure that soils have adequate levels of available plant nutrients to achieve optimum growth. The program must establish the targeted nutrient levels for the soil and ensure the physical structure of the soil will allow plants to extract the nutrient required.

At some point as nutrient is removed from the farming system it must be replaced. There is now a vast range of nutrients and products targeted at improving our soils.

The benefit of any nutrient or product applied to our soils must be assessed based on its proven ability under our local conditions to supply the plants needs. The products must be in a form and applied at a rate and time that limits nutrient losses from the soil profile to optimise plant uptake.

Recognising the need for environmental stewardship and for the efficient use of our non renewable resources Vickery Bros. are a fully accredited Fertcare organisation.

Fertcare is a training, quality assurance, certification and accreditation program. The program tackles environment, food safety and occupational health and safety issues associated with fertilizer and soil ameliorant products throughout the supply chain.

Vickery Bros. aim to provide products that have nutrients in plant available and slow release forms, which are cost effective and proven to work under our soil conditions and climate.

Base pasture fertilisers:

Superphosphate

Traditional pasture fertiliser supplying available Phosphorus (8.6%), for immediate plant uptake and sulfur (11%), which is also immediately plant available.

Organic Super

A low analysis super alternative, based on high quality reactive phosphate rock and gypsum. Phosphorus (7.3%) in slow release form, suitable for soils with a pH (water) less than 5.7. With sulfur (6.8%) in the readily available form.

Reactive phosphate rock (RPR)

Slow release Phosphorous (13.7%) suitable for soils with Olsen P above 10ppm and pH (water) less than 5.7. Sulfur can be added where soil sulphur levels (KCL) are less than 10ppm.

Pasture extender

Combination of slow release and plant available phosphorus (10%) and plant available sulfur (7%) for low Phosphorus soils or high leaching soils. Can be fortified with elemental sulfur if sulfur levels (KCL) are less than 5ppm.

Complete MAP

New compounded product that provides plant available phosphorus (18%) combined in a granule with nitrogen (12%) and sulfur (10%) in plant available and slow release form. This ratio of Nitrogen and sulfur has proven to give more efficient phosphorus uptake by plants.

Super M

High analysis source of plant available nitrogen (9%) phosphorus (19.4%) and slow release sulfur (12.3%) coated to the granule.

Potassium:

Muriate of Potash

Lowest cost form of Potash (50%). Easily blended with other fertiliser.

Sulphate of potash

Good source of both potassium (41.5%) and sulfur (17%), release rates of K are slower than MOP, therefore can be a good option on leaching soils where a split application is not appropriate.

Kmag

Supplies potassium (18%), sulfur (22%) and magnesium (10.8%). As with SOP, Kmag is slow release and offers a good form of Potassium on light leaching soils. Can be blended with R.P.R or Pasture Extender to provide an extended nutrient release for long growing season areas.

Invitation – Dept. of Primary Industries

Tahara Soils Workshop

Do you understand your soil tests? Come along and learn about your most important asset.

The department of Primary Industries are conducting a workshop to help understand your soil and its importance to healthy plants and crops and healthy livestock production.

Guest Speakers: Bernard Noonan, Mary Knight and Bill Stonnill

Date: 15th Dec 09 Time: 4 to 6.30pm
Venue: "Coolangatta" 3120 Condah Rd, Coleraine
RSVP: 14th Dec, Bill Stonnill 0427 077 734

Contact the professional team at Vickery Bros.

For healthy soils.

Agronomy Team

Bill Feely	**0409 427 963**	**James Stewart**	**0427 752 773**
Kate Shaw	**0437 752 707**	**Harry Armstrong**	**0417 052 095**

Depots

Coleraine 03 5575 2777 **Heywood 03 5527 1777** **Edenhope 03 5585 1975**
Mount Gambier 0408 646 220 **Casterton 03 5575 2777**

APPLY LIME NOW! FOR HEALTHIER PASTURES.....

Save on the cost of Lime by having it delivered and spread in December with no cost.
Deferred payment until the end of April 2010.

Ring the Coleraine office or any of the agronomy team at Vickery Bros and
get organised with your 2010 lime program.

If undeliverable return to:
Vickery Bros. Pty. Ltd.
105 Whyte Street
Coleraine VIC 3315

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