

WINTER NEWSLETTER

SEASON OVERVIEW

Incitec and Pivot have finally merged creating an entity that controls approximately 70% of the Australian East coast fertiliser market. Whilst the cost saving synergies of these two companies joining forces has been mooted to all at approximately \$30 million, it would be extremely rare (if we generalise) on previous corporation mergers for the end user to gain any real measureable benefit (ie. lower fertiliser inputs).

It has however been satisfying to see Pivot Shareholders finally get a change for a "pay day" on a virtually unsaleable and severely under performing share.

The merged entity is 70% owned by Incitec (parent Co-Orica) and as such the largest stakeholder will be calling the shots. The outcome here for us is that the Incitec system for fertiliser distribution has always been a dealer model ie. the dealer sells to the customer and carries the debt whereas the Pivot system was an agent model ie. the agent sells to the customer, receives a commission for sales and agronomic support and Pivot carries the debt.

During the transition period the merged entity has offered Pivot Agents the choice of either model. It is our view that once the merger settling in period has been successfully bedded down (2 years), the full blown dealer model will be implemented right across the board. We have chosen the dealer model which puts us on more of a "level playing field" against the Corporates (Elders, Landmark etc.)

You the client will now receive your whole fertiliser account from us exactly the same as if you were dealing from a corporate.

This will be no different to the way 90% of our customers already trade with Vickery Bros. As most would realise we have been supplying fertiliser in this form through our Hifert, Vicfert, Cropmate, Fertico and Agfert supply channels for the past 19 months as well as the Pivot supply channel for the last 6 months.

With the fertiliser industry undergoing dramatic changes; this multi channel supply policy we have adopted allows us to source and provide fertiliser at the best possible price to you our customer every month of the year. Our business goal during the last 5 years has been to develop a fully

intergrated nutrient supply package encompassing the best agronomic advice, fertiliser sourcing and sale, timely delivery, accurate application and the electronic recording of nutrient placement. We think we are now 90% there.

A huge benefit for our clients with this multi channel supply policy is if it agronomically fits, stacks up in monetary terms and makes sense logistically we have no hesitation in mixing, matching and blending other company products together to get the best nutrient distribution available for the client. This is especially important to us with trace elements. Why be content with only 8% of the brew having the trace element you require when we could give you 25% of the brew with the trace element coating at no extra cost. We pride ourselves in nutrient

During the last 18 months our "why are we good at it?; – because fertiliser is all we do" little business has grown steadily. Even with the merger we are still Incitec/Pivot's largest independent Australian agent and in the short time we have been with Hifert (18 months) we have become their second largest distributor.

FERTILISER FINANCE.

Buying fertiliser has never been this easy Vickery Bros Supercredit is a flexible finance package that allows you to pay for your fertiliser at a nominated time in the future so as to fit in with farm cash flow. It is a finance package direct from Vickery Bros that allows you to decide when you want to pay back the total amount – any time between 90 to 270 days. (lump sum or split payments – its your choice)

The interest rate is a very competitive .8% per month fixed for the term of the contract (no interest rate fluctuations). Supercredit is not a loan it is a bill of exchange that Vickery Bros take out for the overall value of interest, establishment fee and the cost of the fertiliser purchased. This way you know exactly what you are paying from the moment you set up your payment terms.

We have also spent a considerable amount of time making sure we have suitable finance options in place for our client base and this is explained further on in the Newsletter.

SOIL TESTING - TAKE CARE WITH YOUR LAB SELECTION

**Bruce Lewis
AGRONOMIST
VICKERY BROS**

A recent article in the Weekly Times has highlighted the potential pitfalls in using soils labs without full registration with quality assurance schemes in Australia. The article published results where labs were asked to test a sample of soil where a large range of results were obtained.

Testing a soil for a certain nutrient availability could be likened to cooking a cake. To get the same result every time you need to follow an exact procedure (or recipe). Failure to do this will give different results; either a different nutrient reading for a soil test or a different cake in the case of a recipe.

When testing soils for nutrients we try and measure the portion of the nutrient in the soil that will be available to the plant. This is different to plant tissue testing where the total quantity of nutrient is measured. When soils arrive in the lab they are dried and ground. A small amount of soil is then mixed with a chemical (extractant) and shaken for a period of time which will absorb some of the nutrient from the soil into the solution. So even before the solution is analysed for the nutrient there are several procedures that can have a large impact on the amount of nutrient in the solution. i.e. drying temperature, grinding method, type of chemical extractant, method of shaking the solution, amount of time the solution is shaken. The importance of the procedure can be illustrated by comparing two similar methods of measuring available soil phosphorus. The Olsen method uses a bicarbonate extractant and is shaken for 30 minutes. The Colwell method also uses a bicarbonate extractant (different concentration) and is shaken for 16 hours. Results from the Colwell method will generally be 2 to 3 times higher than the Olsen method.

In Australia the Australian Soil and Plant Analysis Council (ASPAC) conduct a soil proficiency testing program. Under this program Laboratories can gain certification for soil tests providing the lab produces results within acceptable limits.

The labs also continually analyse standard samples to check their results. The way this works is that in every batch of soils processed through the lab some standard soil samples are included which have a known nutrient level. If the analysis of the standard soils vary outside set limits then the whole batch of soils is repeated. Without such a system checking every soils batch there is no way of knowing if results are within acceptable limits. In Australia the two largest commercial soil labs are owned by fertiliser companies. Pivotest is owned by Incitec Pivot and CSBP is owned by CSBP in WA (Wesfarmers). These labs process high numbers of samples, are highly automated and provide the good value service. These two labs also have the highest quality certification with Pivotest certified for 26 tests and CSBP certified for 22 tests. Vickery Bros use the Pivotest laboratory in Werribee for all soil and plant testing.

Interpretation of soil test results is also an area where farmers can obtain widely varying advice. Fertiliser is generally recommended where a soil/plant test shows that plants will grow better if that nutrient is applied. This sounds simple but can require many years of research to calibrate a soil test for an area. For this reason it's best to use soil tests that have been proven and calibrated with research in your district. In South West Victoria the Olsen phosphorus test is preferred for this reason. Again there are other labs and services around that will offer to test your soil with different types of tests, commonly tests developed in the USA for example. It is often difficult to interpret such tests with little local research to calibrate them for the district. In some cases nutrients are recommended because the soil test is low compared to a ideal soil from another region or even country. However this does not necessarily mean that plants will respond if the nutrient is applied. Again use advice from an agronomist with experience in the district using soil tests calibrated for the district.

POTASSIUM LIMITING PASTURE GROWTH ON LOWER SLOPES AT MELVILLE FOREST. —BRUCE LEWIS

In June this year Tim Brody gave me a call re running some fertiliser test strips to lift the performance of the lower slopes of 'Thurles' at Melville Forest. The lower slopes of the paddocks had very little clover and quite poor growth when paddocks were spelled. Although nitrogen had been used successfully in the prior spring to lift pasture growth rates this would not correct the underlying problem. Potash had previously been identified as a limiting nutrient on lower slopes in the district so the following trial was installed in 2 paddocks. Soil tests were also taken from lower slopes and hill tops in 2 paddocks.

Jim, Dianne and Tim Brody's Fertiliser trials

Tim Brody - Fertiliser Trial 'Thurles' 2003

Product	Rate kg/ha	Nutrients kg/ha			
		N	P	K	S
Triple Super	100		20		2
Control	0				
Super	227		20		25
Super Potash 1:1	454		20	113	25
DAP S cote	112	18	20		13
DAP S cote + Urea	182	50	20		13
Urea	109	50			
Sulphate of Ammonia	238	50			57

SOIL TEST RESULTS

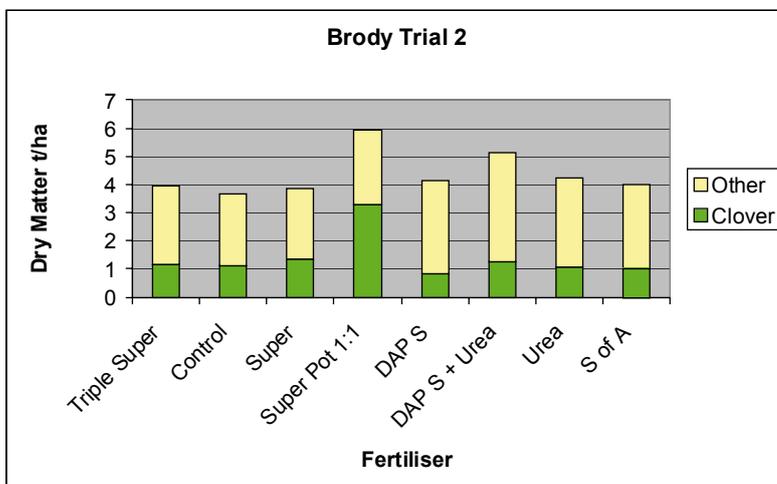
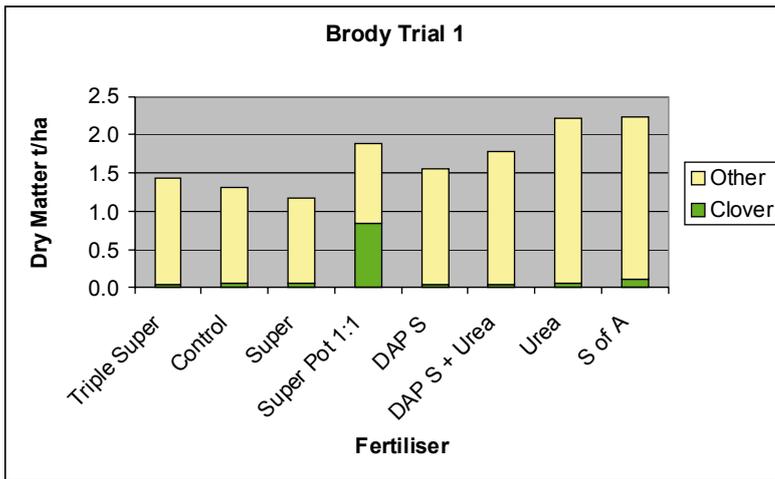
The soil test results showed dramatic differences in potassium between the lower slopes and hill tops in both paddocks. Differences in soil type combined with long term nutrient transfer through set stocking probably account for the large differences in potassium. The results show that large responses to potash are possible on the lower slopes but the hill flats would give no response to potassium. Phosphorus levels were good in all samples.

2metre strip of moly sprayed along fence edge of trial

Paddock	Olsen P	Avail Potassium	Sulphur	pH CaCl
Silcocks slope	19	47	6.2	5.2
Silcocks hill top	19	300	13.0	5.1
Dingley Del slope	19	31	4.6	4.8
Dingley Del hill top	12	210	12.0	4.5 (9%Al)

TRIAL RESULTS

The trial responded strongly to applied super potash 1:1 with some early response to nitrogen. Phosphorus applied without potassium gave little response. The trial confirmed that potash must be applied if levels are critically low (<50). The results also illustrated the importance of splitting soil samples within paddocks if there are differences in topography or pasture performance.



Over the last 12 months it is quite interesting to see the amount of alternative pastures being sown. Lucerne, Chicory and Plantain whether it be as pure swards or in composite pastures are really starting to become the flavour of the month. Normally the expected practice for preparation has been through Brassicas, however due to the Diamond Back Moth causing great damage this isn't becoming viable. Until now the Diamond Back Moth has been hard and costly to eradicate however with new spraying regimes being employed, the likelihood of a wet spring and crops not being moisture stressed the Diamond Back may not be as great an issue.

What I have noticed over the past 2 years has been the increased spring sowing of Lucerne, Chicory and Plantain. There is a growing consensus amongst producers that these types of species do have a place in the grazing practices. Not only are they effective against Diamond Back Moth, but they are also the ready and in place for the next seasons. When a paddock is set aside each year for a summer crop and is out of action for 12-16 weeks depending on maturity there is a potential 3 Tonne deficient. With the sowing of a 3-5 year alternatives such as a Lucerne, Chicory or Plantain this is saved.

LUCERNE

On a recent farm tour north of Coleraine, growers were taken over two farms that had lucerne sown 3 years previous. These paddocks being sown to Prime lucerne a winter dormant had been rotationally grazed throughout the year. With the paddocks likely to be cut an overall utilised tonnage of DM would be between 10-12 Tonne/ha. These paddocks were Spring sown, in tough dry years and in high Aluminium soils. Soil tests were taken and lime applied along with nutrient applied as per soil test recommendation and have been feed accordingly since. In relation to nutrient we have really loaded up the Potash and taken into account K removal, the lucerne has really thrived on the amount of K applied. The performance of the winter dormant Prime has been outstanding and it lends itself to being tolerant of reasonably hard grazing. Furthermore neither paddock was winter sprayed and the amount of subclover that had germinated this year was unreal. It served a dual purpose in that it provided exceptional feed plus created little room for weed invasion. In both circumstances there were no companion species sown, However if opting to sow a companion species then

something that requires rotational grazing would be advisable. Ryegrasses have been tried but generally fail due to moisture stress particularly in dry years as the Lucerne dries out the soil profile dramatically. Ryegrass being shallow rooted doesn't hang on, however Winter Active Phalaris, Cocksfoot and Winter Active Fescues could be options due to their greater root development. With respect to one of these paddocks it had sections in water throughout the season however the Lucerne continued to grow vigorously. Another option would be the addition through broadcasting an early/mid maturing cultivar such as Seaton Park or Trikkala sub clover as these would provide excellent winter feed, stop weeds and also not be an issue later in the season when moisture were to be a limiting factor. Not only are Sheep and Beef producers employing it but numerous Dairy farmers that I work with are now running with it. They are using it on soil types that are not friendly to Ryegrass and are having great success with it.

Apart from not only being a high quality forage it is also a very efficient water user consequently it is seen as very effective tool in the fight against salinity.

PLANTAIN

The emergence of Plantain has come about due to its ability to perform as a specialist short term (3-5 years) quality crop/pasture and forage Brassica crop with high concentrations of trace elements. As with a lot of species it has been discovered that it has other attributes. One that has underlined its value is its ability to handle the Diamond Back Moth. I have seen two examples of it being sown and doing well in this region at Edenhope and Portland. At Edenhope rainfall 575mm on light sand /sandy loam soils it has been sown as part of a permanent pasture mix along with Resolute Winter Active Fescue, Gala Grazing Brome, Porto Cocksfoot, Holdfast Phalaris, Cadiz Serradella, Grouse Chicory, Nitroplus Persian Clover and Trikkala sub clover. The country is fairly hungry but the Tonic Plantain has done really well, this can be put down to the ability of the taproot of the Tonic to source nutrients and moisture. Proper rotational grazing has also helped not only the Plantain but also the other species in the pasture. The second example is at Portland rainfall 850mm on once again sandy/light loam type soil.

The Tonic Plantain was sown along with Puna Chicory, Bolta Balansa, Astred Red clover and Nitroplus Persian clover. There is no grasses in the mix but the Chicory and Plantain have complemented the clovers. We've set this mix up as a HPP mix and it would be anticipated that 3-4 years would be achieved with rotational grazing. Another interesting sideline that has emerged from the Edenhope site has been the persistence of Tonic plantain on a moderately saline area

that was sown down as a trial with some Strawberry clover and Resolute Fescue. It appears to be persisting well given that it has been in for 2 years. The liveweight gains of stock and obvious animal health advantages are well documented but there still appears to be some doubts over the use of Plantain. Seed costs at the moment are \$16-\$18/kg are prohibitive over large areas and in monocultures but this could be tempered by cutting the rate back and putting it in a mixed sward. In mixes it would be advisable to sow it without Perennial Ryegrass due to the aggressive seedling vigour of the Ryegrass. Being a non legume it does respond to Nitrogen so it is advisable to sow it with a complement of 3-4 different types of clover with staggered maturities. Grazing treatment is more akin to a Winter Dormant type lucerne 3-4 weeks spell so the addition of high producing clovers such as Red clover, medium to large leafed Whites such as Waverly, NuSiral and Haifa. The real issue with the Plantain is its ability to handle Chemicals. At the moment there is nothing Registered, however anecdotal evidence in trials undertaken in New Zealand, show there are certain chemicals that can be used at moderate rates. Trifluralin as a pre-emergent which can also be used on Chicory, diuron, Paraquat, di-camba and Fusilade are also listed. To circumvent the weed problem a good spray program should be implemented in the 2 years prior to sowing the Plantain.

CHICORY

Like Lucerne and Plantain, Chicory is gradually gaining credence as a perennial species both as a monoculture and as part of a mix. As with Plantain, Chicory is a non-legume suited to rotational grazing which has good drought tolerance and has high feeding value. The main Chicory cultivar sown to date is the summer active Puna, although winter active varieties such as Grouse and Chico are available but don't have the persistence of Puna. It is suited to well drained soils and unlike Lucerne can tolerate acidic soils. Chicory as with both Lucerne and Plantain are not affected by the pests such as Diamond Back and White Cabbage Moth which are associated with Brassica forage crops.

On a recent farm tour north of Coleraine we inspected a paddock that had Puna Chicory sown into it and that was coming up to its 4th year. The Chicory was sown in a mix with Uneta phalaris, Porto cocksfoot and Leura subclover. The plant density of the Chicory was excellent and really complemented the late season sub clover Leura. Which given the season we are having will stay green till Christmas. Further north at Edenhope on a sandy/light loam type soil Puna Chicory was sown 5 years ago into a pasture mix that contained Porto cocksfoot, Holdfast phalaris, Seaton Park subclover and Paradana Balansa. The Chicory has shown no sign of abating and is persisting well due to a sensible

rotational grazing regime that has not placed the plant under any duress, particularly during Winter.

The downside of these Forages like Chicory and Plantain are issues such as cost of seed and Chemical compatibility. As mentioned before \$16-\$18/kg of seed is extremely high however it can be offset by sowing at a lower rate. In mixes sowing rate of Chicory is 1-1.5 kg/ha compared to 4-5 kg/ha in a monoculture. There is only one Chemical registered for Chicory and that is Raptor. There are other chemicals that are soft on Chicory such as Jaguar up to 1 litre/ha depending on Chicory size and Broadstrike when plants are small up to 45 gm/ha. Alternatively another option would be moderate rates of chemical and adopt a spray graze approach that doesn't put the plant at danger.

Below listed is a feeding value of Chicory at P.V.I (mean over 3 years.)

	Chicory, White clover	Tall Fescue, Sub clover	Perennial ryegrass, sub clover
LW gain late Spring (g/day)	240	190	179
LW gain mid Summer (g/day)	168	16	14
Lambs finished/ha	33	9	9
Hot carcass kg	19.8	18.8	18.2

WHAT IS SELENIUM AND WHY IS IT NECESSARY?

Selenium is trace element which is essential for animal nutrition, deficiencies can cause serious problems ranging between muscles dysfunction's to death. However, it should not be confused with other disease that can have similar symptoms. Selenium is important in maintaining growth in young stock and fertility in ewes and acts as an antioxidant which aids in the prevention of various other animal diseases.

For wool producers it is particularly important as it is crucial for wool growth, up to 20% of a sheep's total selenium levels are found within the wool. Production responses in terms of wool growth have been in the order of 5 to 10 per cent with selenium supplementation, with the effect carrying on for 2-3 seasons.

What are the signs of a selenium deficiency?

The most obvious clinical signs of a deficiency are found in young stock ie: calves and particularly lambs, with 10% of the flock or herd being affected. Some of the symptoms most commonly seen in young stock are a reluctance to move, an arched back, generally poor production both in growth and wool and scouring.

Although care should be taken to determine the actual cause, as an overdose of selenium can be toxic, an oral dose of 10 – 15 mg is known to kill lambs, as well as a 5 mg of selenium as an injection. Stressed animals will be more susceptible with the toxicity ranging from acute to chronic.

Diseases that are associated with selenium deficiencies are:

Diseases	Age Affected	Clinical Signs	Comments
Congenital White Muscle	New born Lambs	Sudden death, lameness, reluctance to move	On heavily supered, clover disease dominant pastures in lush seasons.
Delayed White Muscles Disease (WMD)	1 to 3 months	Lameness. Reluctance to move, "paralysis"	On heavily supered, clover dominant pastures in lush seasons.
Weaner illthrift	Weaners	Poor Growth and wool production	Not necessarily associated with WMD
Scouring	Young Animals	Scouring	Occurs on selenium responsive illthrift properties.
Infertility	Ewes	Dry ewes due to embryonic mortality	Occurs only on WMD properties

How do I know if my stock need selenium?

Soils and pastures can be tested for selenium deficiencies but to get a more accurate assessment you should talk to your local veterinarian and determine whether your area is affected. Blood tests or liver samples can be taken from the animals at slaughter to get an accurate answer, at the same time copper and cobalt levels can be checked as well.

Typically pastures that have shown to be deficient in selenium tend to be found in areas that have acidic basalt/granite soils, a rainfall over 450mm, pastures that are clover dominant and are known as having a heavy or long term fertilizer history particularly with sulphur fortified superphosphate or gypsum products. All, or a combination, of which can be found in the Western District of Victoria.

Animal's access selenium through pasture plants even though this particular trace element isn't required for plant development. Although selenium levels can change throughout the year and tend to be at their lowest when the plant is actively growing through spring or when there has been a good autumn break followed by a clover dominant spring. Therefore if taking tests from pastures for selenium, a single sample may not provide a reliable diagnosis.

Prevention and Control of Selenium Deficiencies

There are a variety of different products on the market to correct selenium deficiencies and once an accurate diagnosis is made you need to make an assessment based on what is the best solution for your enterprise. On selenium treated pasture, young stock are protected straight from birth which isn't the case with drenching as you must be careful of not missing an

animal or overdosing. In the case of 12 week old lambs, pellets can't be used because the pellet won't stay in the animal until the rumen is fully developed and in adults they can avoid being treated by coughing up a bullet once it is administered. Selenium fertilizer treatments don't require any extra stock handling and will also reduce animal stress compared with the current treatments all of which can also lead to poor production performance.

Vickery Bros have available selenium additives for your fertilizer which can be blended for your specific requirements that will give you protection from selenium deficiencies for up to 12 months which is the quickest, reliable and economic form of application.

For more information contact Vickery Bros, (03) 5575 2777.

NEW STAFF MEMBER



We would like to introduce Meaghan Ryssenbeek who has joined our team as a Sales Agronomist. Meaghan has completed an Advanced Diploma in Applied Science at Longerenong and has previously worked on a variety of grazing properties throughout Victoria mainly within the beef sector.

Meaghan comes from a farming background and her family currently owns 300 acre's in Alexandra, near Mansfield. Her and her father have recently been involved in a Pasture for

Profit program and through this have developed a greater understanding of their businesses and its limiting factors. The farm currently is a profitable cell grazing system running 50 Angus breeders with autumn calves and 140 head of agistment steers on 2.5 ha cells. The future plan is to expand the business further into a larger operation.

Meaghan is looking to advance her technical skills in soil, pasture compositions and grazing management and their relationship with fertilisers and profitability. Her future goal is to establish a sound relationship with all her clients, and work with them in developing a comprehensive fertilizer and grazing program which will assist them in reaching their own personal goals on their property.

CREDIT CARD FACILITIES

Vickery Bros Pty. Ltd. can now offer payment by Credit Card (Mastercard, Visa or Bankcard) in the office at 101 Whyte Street, Coleraine or over the phone with Jade or Sue.

The Bank's 1% transaction fee will apply to all credit card payments.

Debit card transaction by Eftpos (Cheque/Savings account) can be paid without incurring any extra fee.

If undeliverable return
to
Vickery Bros. Pty. Ltd.
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Coleraine VIC 3315

