whats up...

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Pursehouse Rural Newsletter

Incitec Pivot Townsville Visit by John Nott

Colin Parkes, Pursehouse Rural Narrabri Branch Manager and myself (John Nott) Pursehouse Rural, Senior Cotton Agronomist travelled to Brisbane September 26 where we met up with Craig Forman, Incitec Pivot (IPL) Area Manager, to fly to Townsville. Once there we toured around IPL's facilities including the Product Distribution Centre and the wharf facilities where all of Phosphate Hill's products are distributed across Australia and the globe.

IPL's current focus has changed from a fertiliser supplier to a fertiliser manufacturer over the last few years. As a result they are trading large amounts of different fertilisers across the globe. The wharf facilities receive one 3,300 tonne train load of fertiliser per day from their fertiliser manufacturing facilities at Phosphate Hill. The wharf facilities load approximately three 40,000 tonne ships per month, with the capacity to load ships at the rate of 1,000 tonne per hour.

The following day we took a one and a half hour flight to Phosphate Hill, located around 380 kilometres south east of Mt Isa, in the middle of what seemed like no where. With forecast temperatures of 36 degrees, we inspected the supply and production chains from beginning to end.

The plant is renowned to be the most remote chemical manufacturing plant in the world, with over 300 employees the scale of investment is huge. The mining section is made up of six shallow pits, which hold the remnants of an inland sea from several million years ago. The mining is quite specific and termed selective mining as the phosphate rock body is only 10-12 metres in depth.

The mining of the ore is all open cut which sees parcels of 100,000 tonne lots sent to the storage area, then blended with varying ore qualities to produce specific concentrations which is sent through the plant to produce desired products. The plant works on several levels. As a quick over view, they produce their own phosphoric acid then react it with the rock phosphate to produce a phosphate slurry. It is then reacted with concentrated sulphuric acid and anhydrous ammonia in the granulation plant and other elements are added. It gets screened and graded then coated with oils and colouring agents and sent to driers to finally end up in a 90,000 tonne storage shed ready for rail transport.

Initial Crusher

PDC Storage Shed 90000 tonnes

The raw ingredients are supplied to Phosphate Hill via rail from Townsville and Mount Isa. Natural gas for anhydrous ammonia production is supplied from the Gulf pipeline. The sulphuric acid is supplied by X Strata operations in Mt Isa where they produce approximately 1,000,000 tonnes of highly concentrated product from their copper smelter annually. Phosphate Hill uses approximately 80% of this annual production.

The plant produces mono ammonia phosphate and di ammonia phosphate as well as specialty products such as Supreme Z extra, DAP 8, MAP 10 and MAP 11. These products are despatched daily from Phosphate Hill by rail for Townsville, which takes around 26 hours each way. As the day wore on a dust storm blew in which delayed our flight out by three hours. We almost had to spend the night there, which was quite surreal.

The isolation becomes apparent when we saw the huge storage facility being built to store the Gypsum by-product. It was a forty-hectare, rubber-lined bunker designed to have a fifty metre high stack built onto it. For every one tonne of starter fertiliser produced they also produce three tonnes of good quality chemical gypsum. The gypsum is deemed unmarketable at a competitive price due to the isolation and freight costs, so it just sits collecting dust.

It was interesting seeing the scale of investment out there and I would recommend the trip to any one who gets the chance. The next day Mark Holland, Craig Forman, Col and myself managed to go fishing for a half day charter where we managed to catch a couple of great Spanish Mackerel each. It was a great way to top off the trip, many thanks to IPL for the opportunity.

Technical Update
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New Chemical for Grass Control

BOXER GOLD

Boxer® Gold is a new pre-emergent herbicide set to be released in early 2008 by Syngenta Crop Protection. Boxer® Gold (pending APVMA approval) will be registered on wheat and barley for the control of toad rush and annual ryegrass. It may also be registered on other grasses and broadleaf weeds in the future.

Key Benefits:

New Chemistry- Boxer® Gold is a 920g/L EC formulation containing 800g/L prosulfocarb and 120 g/L S-metolachlor. Boxer® Gold is classified as a Group E and Group K mode of action making it a multi site effector.

Resistance Management- Because Boxer® Gold is a multi site effector it is classified as a low resistance risk. It will also provide an alternative pre-emergent herbicide to Group D (trifluralin) and Group B (sulfonylurea) herbicides.

Weed Spectrum- Boxer® Gold has extensive field trial control of annual ryegrass equivalent to or superior to current registered pre-emergent products. Figure 1 shows the level of control of 2.5L/ha on annual ryegrass.

Low Volatility- The active ingredients in Boxer® Gold are low in volatility. This means it is relatively stable, so there is not the urgency to incorporate into the soil like trifluralin.

Flexibility of use- Boxer® Gold can be used on both wheat and barley in a conventional or minimum till system. It does need to be mechanically incorporated by sowing.

Re-cropping intervals- The short residual activity of Boxer® Gold and broad crop tolerance is expected to pose no restrictions to sowing subsequent crops, unlike sulfonylurea herbicides.

For more information on Boxer® Gold please contact your local Pursehouse Rural agronomist

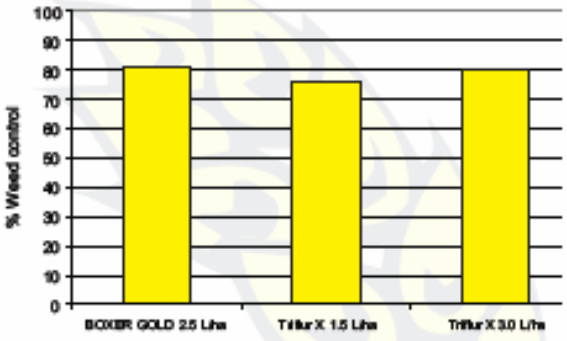

Figure 1: Efficacy of BOXER GOLD in the control of Annual Ryegrass (*Lolium rigidum*), Southern Australia 2006. Mean of 5 field trials. Source: Syngenta Crop Protection.

Fly Season

Well it's that time of year again when flies are out and about. This season is shaping up to be a bad one with numbers increasing daily. Cattle are most bothered by the Stable and House fly, both types having fast growth rates.

The Stable Fly takes just 13-18 days from hatching to egg producing adults. One female lays 800 eggs over 25 days in moist, decomposing organic matter such as manure, grass cuttings and silage. Stable Fly's painful, bloodsucking bite causes irritation and distress and the cattle become preoccupied with avoiding them.

The House Fly can take 7-50 days from hatching to egg laying adults depending on temperature. A female lays 120-150 eggs over three to four days. House Flies feed on body secretions around the mouth, nose and eyes, transmitting diseases such as Pinkeye and Mastitis. Both types of fly have the same impact on cattle, mainly loss of production due to interrupted feeding routine and disease. By using an approved cattle lice and fly pour-on early you will limit further fly breeding and by re-treating during the summer months control will be continued. There is now a injectable Pinkeye treatment for cattle and it can be used on calves as young as one week of age. The Pinkeye vaccine is given by subcutaneous or intramuscular injection and is a one off dose with no booster required.

For more information see your local Pursehouse Branch.

Save the Date…

Barley Trial Inspection

When: 14 November 2007

Time: 5.00pm

Location:
Wilmott's @ Blackville

October Weather Summary

visit http://www.pursehouserural.com.au/services/weather_station.html

Location	Average Temp (°C)	High Temp (°C)	Low Temp (°C)	Number of Days > 35°C	Rain mm	Average Wind Speed Km/h	High Wind Speed Km/h	Dominant Wind Direction
Cattle Lane, Willow Tree	17.3	34.2	0.1	0.0	32.6	7.3	61.2	S
"Murlow", Quirindi	17.3	32.2	0.3	0.0	17.4	6.5	54.7	S
Mullaley	19.4	33.7	4.0	0.0	48.7	11.6	78.9	S
"Dow Site", Breeza	18.9	33.4	1.4	0.0	26.6	7.3	61.2	SSE