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BioAg NEWSLETTER

An extraordinary year needs an extraordinary fertiliser!

Widespread fertiliser shortages and soaring prices means many Australian grain producers are likely to cut back on their usual fertiliser rates, leaving them at risk of failing to capitalise on record wheat prices.

BioAg Director, Anton Barton, said the cost of most agricultural fertilisers had more than doubled in the past 12 months due to record commodity prices, the rapid expansion of the U.S. biofuels industry and the introduction of fertiliser subsidies in India and Pakistan.

"Given that most fertilisers and their ingredients are sourced from overseas, and that Australia accounts for less than four percent of global demand, Australian farmers are at the mercy of this massive supply-and-demand gap," he said.

"As a rough guide, the cost of a typical application of MAP has doubled from \$60/ha to \$120/ha over the past 12 months alone. In fact, fertiliser prices now account for more than half of all input costs.

"As a result, we believe that many farmers are going to be unwilling or unable to implement a satisfactory crop nutrition program using conventional fertilisers."

Mr Barton said BioAg's unique range of liquid fertilisers presented a cost-effective solution to this dilemma.

"At about \$10/ha plus application costs, BioAg liquid fertilisers have never looked so attractive, even to those producers who have never considered using them before," he said.

"Sure, a BioAg foliar program involves one or two additional passes over the crop but against this, farmers have to ask themselves if their crops have sufficient nutrition to produce satisfactory yields.

"We understand the cost pressures that farmers are facing and despite increased raw material costs, we are committed to maintaining prices for BioAg liquids at last year's levels."

BioAg fermented microbial liquids provide plant-available nutrients directly to crops, as well as stimulating microbial activity in the soil, thereby maximising plant vigour and yield potential.

"BioAg Soil & Seed applied to bare soil and as a seed treatment will improve soil microbial activity, thereby optimising the availability of whatever conventional solid fertilisers you can afford to apply at sowing," Mr Barton said.

"BioAg Balance & Grow applied as an early to mid-tillering treatment will improve plant vigour and root development, helping plants to overcome herbicide stress.

"And finally, BioAg Fruit & Balance applied in late winter and early spring in conjunction with a few kilograms of liquid nitrogen will maximise yield potential and grain quality."



Better soils, better crops . . .



Central NSW grain grower, Scott Darcy.

Central NSW grain growers, Scott and Paul Darcy, have significantly increased their yields and returns after trialling a BioAg biological crop nutrition program.

The brothers grow 350 hectares of wheat, barley, oats and lucerne and run about 1900 Merino and Dorper crossbred sheep on their 1,030 ha property, "Traversdale", 30 kilometres west of Forbes. The family partnership also includes their brother, Richard, and father, Brian, who farm at Tullamore.

Concerned about the health of their soils and the soaring cost of

conventional acidic fertilisers, the Darcys have applied blended rock phosphate fertilisers for the past three years to supply their cereal crops with phosphorus and calcium.

"It doesn't matter what sort of fertiliser you use, if your soil is stuffed you're fighting a losing battle," Scott said. "We don't use a lot of chemicals on our sheep, pasture or crops, so we think our soils are pretty healthy. We want to keep them that way or even improve them."

Last year, they took this natural approach a step further by using BioAg Soil & Seed as a seed dressing on one small paddock of wheat in 2006. "We were pretty impressed," Scott said.

"The root development was twice that from other seed treatments we have used and the plants looked much healthier. If plants have a bigger root system, it means they are getting more nutrients and moisture and are actively photosynthesising."

Last year, the brothers decided to use BioAg Soil & Seed as a seed dressing in a 16-hectare paddock of Dictator forage barley being grown

for registered seed. Seed for a crop of Marombi winter wheat was also treated.

The crops were sown in early June at 35 kg/ha with 40 kg/ha of rock phosphate fertiliser and were grazed by lambs. By August, both crops were showing signs of wear and the brothers contacted Cumnock-based BioAg agents, Andrew and Rhonda Watt, for advice.

Tissue analysis revealed the both crops had nitrogen, phosphorus and calcium deficiencies. The recommended program included a foliar application of calcium nitrate (12 kg/ha for the barley and 9 kg/ha for the wheat) and 1.4 g/ha of a dandelion supplement, which helps plants to help draw calcium and silica from the soil.

The results were astonishing, not the least being a 150 mm height difference between the treated and untreated crops when harvested in early December. More importantly, the Dictator barley yielded 1.3 tonnes/ha compared to 0.75 t/ha for the untreated crop, while the treated Marombi wheat yielded 2.6 t/ha – more than twice the 1.2 t/ha yield of the untreated wheat.

The recommendation also included a foliar application of BioAg Balance & Grow. However, worried about the timing and the outlook for the crop, Scott decided to apply the treatment at 2.5 L/ha to a barley crop on the family's other farm instead. The results were equally spectacular, with the treated barley yielding 1.7 t/ha, more than 40% more than the untreated section.

Scott estimated that the foliar treatments lifted his returns at "Traversdale" by \$350/ha for the

The basis of a BioAg winter cereals program

BioAg solid nutrients and liquid microbial cultures provide an immediate and ongoing supply of "biologically active" nutrients directly to plants, as well as stimulating microbial activity in the soil. Key products include:

- **BioAgPhos®:** A microbially-digested reactive phosphate rock that provides immediate and continuing supply of plant-available phosphorus.
- **BioAg Soil & Seed®:** A soil biology nutrient and seed inoculant which encourages rapid germination, root development, crop establishment and soil microbial activity.
- **BioAg Balance & Grow®:** A complexed foliar growth nutrient that stimulates vegetative growth, root development and soil microbial activity.
- **BioAg Fruit & Balance®:** A complexed foliar fruiting nutrient that increases grain quality, yield and soil microbial activity.

and better pastures . . .

Southern NSW beef producer, David Pugh, claims his pastures are responding more vigorously after rain and cattle are growing faster after adopting a biological nutrition program two years ago.

David manages the Holbrook region property "Nioka", which is owned by Tim and Ariel Arnott, who bought the 1,050-hectare holding as a higher-rainfall addition to their Jerilderie-based Coolbaroo Pastoral Company.

The property's 650 to 700 mm annual rainfall and native and improved pastures allow it to carry about 400 Angus cows and replacements, with yearling steers turned off for the feedlot trade.

David, who previously spread up to 120 kg/ha of single superphosphate over half of the property each year, said he had been looking for a more effective and environmentally-friendly method of pasture nutrition for some time.

"There were no obvious problems but neither Tim nor I like artificial chemicals and we were looking for an alternative," he said.

The two men attended a number of biological farming seminars before asking BioAg to develop a tailored program for the property in 2006. After soil tests revealed calcium and phosphorus deficiencies and mild acidity, it was decided to treat half the property each year with 500 kg/ha of lime and 200 kg/ha of the company's "biologically active" reactive phosphate rock, BioAgPhos.

David has already noticed a number of improvements in the 246 hectares of pastures that have been treated with BioAgPhos. "Every time we receive a bit of rain, we seem to get a much better response in the treated paddocks than in the others," he said.

"Because of the dry years, you'd think there'd still be some super in those other paddocks but obviously it

barley and \$150/ha from the wheat for an outlay of less than \$50/ha. "We made more money on that 16 ha than we did on the rest of our cereal enterprise," he said.

"We had a wet harvest but the seed quality and seed weight of the treated wheat hardly varied, whereas the untreated wheat went blackish and lost a lot of weight. The treated plants seemed to hang on a lot better and looked healthier for the last month or so.



David Pugh, manager of "Nioka", Holbrook, NSW.

isn't being released. The treated pastures are a deeper green, sub-clover is reappearing and everything has thickened up. There appears to be more dry matter feed per hectare and less Paterson's Curse.

"The cattle seem to do a lot better on the BioAg country than on other paddocks. The calves are putting on weight quicker so they must be getting better nutrition out of the pasture."

Although it is still early days, David believes the biological nutrition program will improve soil health and enable him to run more cattle and turn off more kilograms of beef per hectare.

"We hope to be able to get the cows and heifers back up to joining weight more quickly after calving and maintain body weights through the winter months without having to feed silage or hay," he said.

"We have been running the place at 75 percent of its carrying capacity through the drought so we won't have to spend thousands of dollars re-establishing pastures after it rains."

"Our harvesting contractor was amazed at the difference and wanted to know what we'd used so he could use it at his place this year. The treated barley also grew well, and the seed weight and quality were excellent.

"We're very happy with the BioAg approach. We're going to adopt a complete BioAg fertility program on most of our paddocks this year, including foliar applications of Balance & Grow, Fruit & Balance and calcium nitrate."

Two more join the BioAg revolution!



BioAg is already Australia's leading biological nutrients manufacturer and now we are pushing into several export markets, including New Zealand and the UK. One of the key factors behind the company's success is the calibre of our committed and inspired staff.

To that end, BioAg directors, Jep Gates and Anton Barton, are delighted to announce the addition of Geoff Clarke to the company's senior management team. Geoff has spent the past five years with the NSW Government Department of State and Regional Development in Wagga Wagga, where he was Export Adviser for Southern NSW.

An industrial chemist by training, Geoff has more than 20 years' experience in international trade and small enterprise management consulting in Australia and in South East Asia. He has a particular interest in the sheep and wool, livestock genetics, food and beverage sectors. His knowledge of agribusiness and international trade brings an even greater holistic approach to the company.

One of Geoff's first major projects will be a 14-day tour of India and Pakistan, where he will be exploring export potential for BioAg products in two of the world's fastest-growing agricultural producers.

On a local level, customers and agents contacting BioAg will be greeted by our new receptionist, Kristin Evans, who has recently completed her Higher School Certificate at Leeton. Kristin has well-developed customer service skills, having worked in retail during her school years. She has also worked as a polling official with the Australian Electoral Commission.

Raised on a mixed farming property in the Grong Grong district, Kristin has a strong sense of community and intends to stay in local area. She is a keen sportswoman and participates as a player or a coach in basketball, netball and water skiing.



Geoff Clarke



Kristin Evans

Major advertising campaign

BioAg is implementing a major advertising campaign this winter to reinforce that BioAg liquid nutrients provide a cost-effective alternative to solid fertilisers. The advertisements will appear in the major rural newspapers, *The Land*, *Weekly Times* and *Stock Journal* between May and August. Let us know what you think!



Better soils. Better crops. Better stock.™

**For more information,
phone 1300 599 911 or visit www.bioag.com.au**