

Solid chemicals



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Strategic early planning and stocking of chemicals on farm: It pays off says farmer

A shortage of a chemical can mean more expensive product when you get it, or worse, no chemical when you want it.

Here are some of the reasons why supply shocks could occur:

- 1. Australia is just one small country in the world.** Other countries also have demands and we need to get in the queue. Modern chemical agriculture has expanded with some countries having better margins on chemicals.
- 2. Supply issues at the foreign source.** These include environmental restrictions on production or input restrictions such as energy for production. There are also one-off events like the Olympic Games which affected supply from China in 2008 or regular events like Chinese New Year that disrupts supply around February and onwards.
- 3. Shipping delays.** There are no direct shipping routes from China to Fremantle so containers are trans-shipped on route, often via Singapore. A weather



Carl Fuchsbichler, one of an increasing number of astute farmers purchasing chemicals earlier and more strategically

delay or port congestion can blow out to a week if a container misses its second boat in Singapore. Additionally, there is the aggravation of local wharf inefficiencies or a strike.

- 4. Domestic supply issues.** Even after prompt arrival, prompt supply can't always be counted on. This year for example there was a shortage of 110L drums. If the product needs to

be formulated it can be subject to the supply of other raw materials- being within quality specifications, and the availability of formulation capacity.

- 5. Local Seasonal conditions.** Demand varies significantly according to seasons like summer rains, outbreaks of disease or insects. Timing of the seasonal break might not significantly change total use, but an early break like this year can put added pressure on an already tight schedule.
- 6. Local Market Conditions.** The stocking decisions of individual suppliers are unpredictable.

The simplistic solution for most suppliers is to buy sufficient product to cover the highest expected demand and buy it earlier. The risk and realities of trying to fund this stock level would be commercially foolhardy and unrealistic for most suppliers.

Reduced margins in the chemical industry is a factor that overlays all the above issues. Lower margins mean lower stock levels held and supply chain cycles must be as tight as possible.

Farmers can take more control

Astute farmers are recognising the problems in being vulnerable to the vagaries of supply so they're proactively doing something about it by forecasting their chemical needs and making earlier purchases.

Carl Fuchsbichler who farms 12,000ha at Koorda, WA is an example.

Carl says he tries to plan and purchase his needs months in advance.

"I don't gamble on suppliers always having what I want, when I want it," he said.

"Sure things change but I can reasonably anticipate most of my order. Even the top ups I try to get onto as early as possible.

"Whatever I don't use this year it's no big deal. It keeps, and I will use it next year".

He said he is aware there is a small interest loss or opportunity cost of the money being tied up in chemicals, but that's nothing compared to the cost of not having product on time.

Carl said that at times he can buy cheaper by taking advantage of earlier ordering, or

strategically buying product when the price is relatively lower and not when everyone else is wanting it.

He added that this did not always work out to be a cost advantage because prices could go down, but at worst, he gets a fair average. He does not lose sleep over it because there's more upside in having the peace of mind that the chemical is ready for him to use when he wants it.

4Farmers Products

With Cross Reference to similar trade name products

Herbicides

Similar Product

2,4-D Amine 625, 750	Various
2,4-D Ester 800	Various
2,4-D Ester 680	Various
2,4-D plus Picloram	Tordon™ 75-D
Atrazine 900 WG 600SC	Atradox®, Gesaprim®
Bensulfuron 600 WG,	Dupont Londax DF®
Bromox MA	Bromicide MA®
Bromoxynil 200	Buctril®
Brown Out	Spray.Seed®
Carfentrazone 240 EC	Hammer®
Chlorsulfuron 750 WDG	Glean®, Siege®
Clethodim 240EC	Select®
Clodinafop 240EC	Topik®
Clopyralid 300EC, 750SG	Lontrel®
Cyanazine 900 WDG	Bladex®
Dicamba 500 EC	Dicer 500®
Diclofop-Methyl 500	Hoegrass®
Diflufenican 500SC	Brodal®
Diflufenican/Bromoxynil	Jaguar®
Diuron 900DF	Diurex WG®
Fluazifop 212EC	Fusilade®
Flumetsulam 800 WG (RP)	Broadstrike®
Fluometuron 900WG	Nu-tron 900 DF
Fluroxypyr 200 EC	Starane™
Glyphosate 470,450,360,540	Roundup®
Glyphosate 875	BiDri700®, Roundup Dry®
Glufosinate-Ammonium 200	Basta®
Haloxypyr 520EC	Verdict®
Imazethapyr 700WG	Spinnaker®
Ipypyr 750WG	Arsenal®
Ipac 240	Flame®
LV MCPA 570	Nufarm LVE Agritone®
LVE MCPA/ Diflufenican	Tigrex®
MCPA 500, 750	Various and Agritone®
MCPA/Picloram	Tordon™ 242
Metolachlor 960 EC	Dual®
Metribuzin 750WG	Lexone®, Sencor®
Metsulfuron Methyl 600WG	Ally®
Oryzalin 500SL	Surflan®
Oxyfluorfen 240EC	Goal®, Striker®
Paraquat 250	Gramoxone®
Pendimethalin 330EC	Stomp®, Argo®
Propyzamide 500SC, 900WG	Kerb®, Edge®
Quizalofop-p-ethyl	Targa®
Simazine 900WG	Gesatop®, Simagranz®
Sulfometuron 750WP	Oust®
Sulfosulfuron 750	Monza®
Tralkoxydim 400WG	Achieve®
Tri-allate 500EC	Avadex®
Triasulfuron 750WG	Logran®
Tribenuron Methyl 750	DuPont™ Express®
Triclopyr 600EC	Garlon®
Trifluralin 480EC	Treflan®
Tri-pick	Grazon®
Turf ControlISC	Spearhead®

New Product

(RP) denotes products with Registration Pending at printing

Seed Dressings

Similar Product

Imidacloprid 600 SC	Gaicho®, Emerge®
Imid-Triadimenol	Zorro®
Iprodione 500 (RP)	Rovral®
Procymidone 500 SC	Sumislex®
Tebuconazole 25T	Raxil®
Triadimenol 150 + WP	Baytan®, Baymax®
Triadimenol 150 liquid	Baytan®, Baymax®
Triticonazole 200	Real®

Fungicides

Similar Product

Azoxystrobin 500 WG	Amistar WG®
Carbendazim 500	Bavistin®, Spin®
Chlorothaloril 720	Bravo®
Epoxiconazole 125 SC	Opus 125®
Flutriafol 250SC, 500SC (RP)	Impact®, Intake®
Iprodione 500	Rovral®
Mancozeb 750 WG	Penncozeb 750 DF®
Procymidone 500	Fortress 500®
Propiconazole 250EC, 500EC	Tilt®250®
Tebuconazole 430SC	Folicur®
Triadimefon 125EC	Triad®, Slingshot®
Triadimefon 500 Dry	Tee-Fon 500®
Triadimenol 250EC	Bayfidan®, Shavit®

Insecticides

Similar Product

Abamectin 18EC	Vertimec®
Alpha-Cyber 100EC, 250SC	Fastac Duo®, Dominex®
Aluminium Phosphide Fumigation Pellets	Phostoxin®
Bifenthrin 100EC	Talstar®
Chlorpyrifos 500EC	Lorsban®
Cypermethrin 260EC	Scud®, Sonic®
Dimethoate 400EC	Rogor®
Fenamiphos 400	Nemacur®
Fipronil 800 WG	Regent®
Imidacloprid 200SC	Confidor®
Lambda-Cyhalothrin 250SC	Karate Zeon®
Omethoate 290	Le-mat®
Pirimicarb 500	Aphidex®, Pirimor®

Rodenticides

Similar Product

Rat and Mouse Bait Pellets	Talon®
Zinc Phosphide	MouseOff ZP®
Unsterilised Mouse Bait	
Strychnine Alkaloid Crystals	
1080 Oat baits	

Other Products

Similar Product

Ammonium Sulphate	
Boom Clean Dry	
Citric Acid	
Ethephone 720 SL	Galleon® Growth Regulator
Farm Pro 700	LI 700®
Foam marker	
Metaldehyde Snail/Slug Bait	
Glyphosate Wetter	Gly Wetter Plus Surfactant®
Penetrator	Pulse Penetrant®
Speedy Spray Adjuvant	Hasten®
Sunshade Spray Adjuvant	AntiEvap®
Turbo Charge	Enhance, Supercharge®, Uptake®
Wetter 1000	
Zinc Phosphide Mouse Bait	Mouse Off®

Herbicides in solid form could be better in heavy stubbles

Research that 4Farmers is undertaking on an experimental solid form of pre-emergent chemical is showing that this form of the chemical could be useful for controlling weeds where there is heavy coverage of stubble residue.

The problem with the traditional liquid products is that they get bound to stubble residues before getting onto the ground where they're required to work.

A patented 4Farmers pre-emergent herbicide is in a solid form.

This form enables it to fall through the layer of stubble, enabling more herbicide to be physically placed where it's needed to work.

Trials so far have been benchmarked against Trifluralin 480 EC in controlling Ryegrass.

On bare ground the performance of the experimental product has been the same or comparable with liquid. In the presence of stubble, the solid herbicides had better results demonstrating that the theory has potential.



We hope to obtain more results over a broader scale next year.

Interested growers struggling with weed control in heavy stubble are welcome to get in touch with us to discuss the product.

The problems of getting spray to penetrate through heavy stubble could be overcome with a solid form of chemical

Pre Emergent Treatments with 100% Stubble Cover

Treatment	Ryegrass Count 0.325m2
Control	13.7
1L/ha Trifluralin 480 EC	6.2
4Farmers Experimental Product	0.7

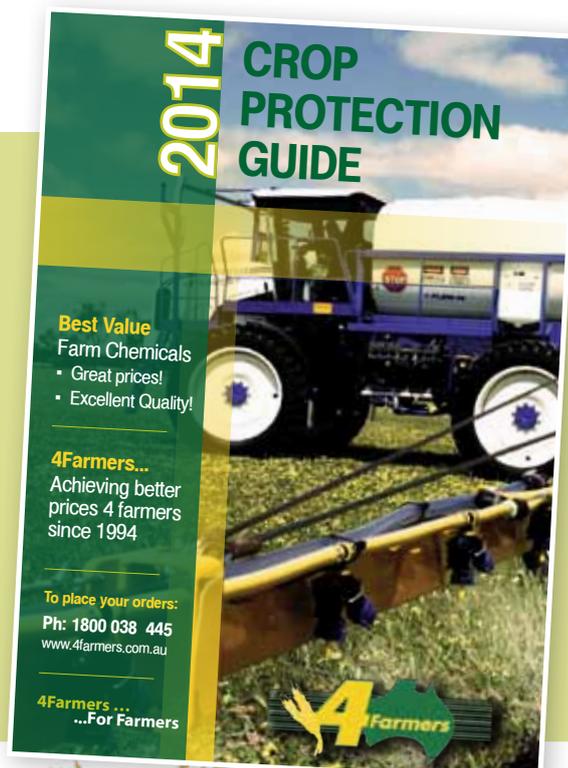
Your advice would be appreciated

Have you used the 4Farmers 2014 Crop Protection Guide?

- Did you find any errors?
- Is there anything you would like to see us include to improve it?

There is a reward for the first 5 clients able to give us suggestions that we can incorporate into our next edition.

We've noticed several items that we want to improve on. That is why 4Farmers clients can look forward to the 2015 copy being even better.



TIMERITE®: Useful Red Legged Earth Mite control Strategy

TIMERITE® is a package that predicts the time Red Legged Earth Mites (RLEM) have stopped laying their normal winter eggs and just before the diapause eggs are produced. These eggs survive the hot dry summer being protected inside the dead cadavers of the adult female mites.

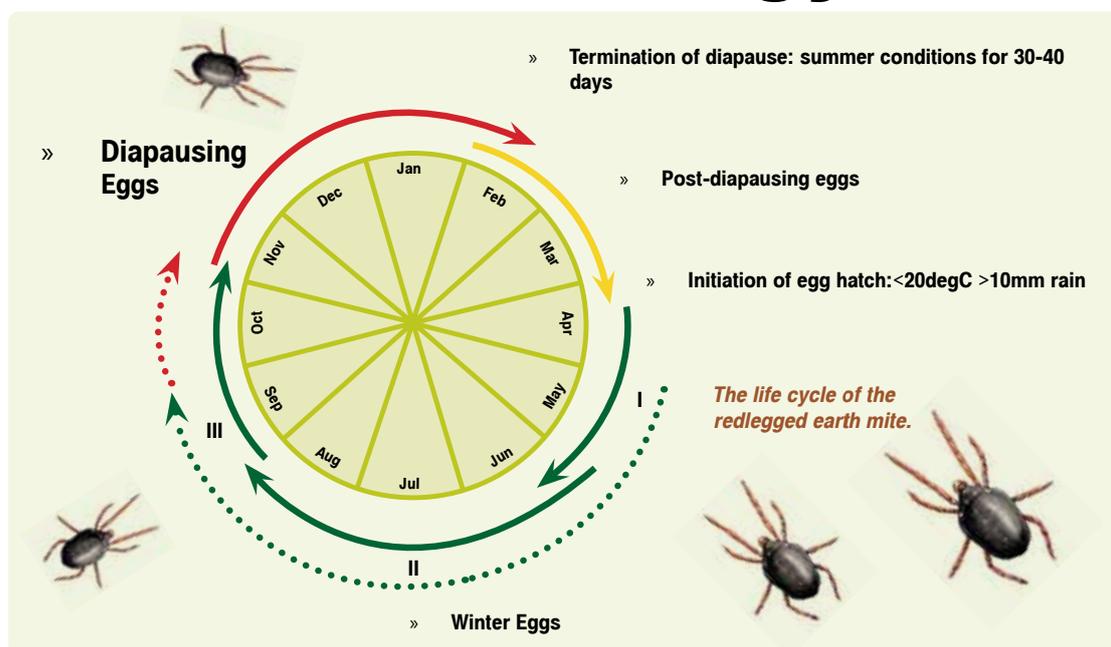
Chemical sprays will kill active mites but not their eggs. Therefore it is important to spray when most of the population are in their active stage.

Trials have shown a single spray in Spring at the recommended date can result in up to 97% control 8 months later.

Dimethoate 400 is one such insecticide treatment. At approximately 80ml/ha it indicatively costs only \$0.60/ha.

Omethoate 290 at 100ml/ha indicatively costs \$2/ha.

Omethoate has the advantage of having better residual which could be useful if spraying takes place a little earlier than the optimum date.



Spraying three weeks earlier than the optimal date still achieves good results. The effectiveness of the single spray, however, rapidly diminishes after the optimum date to little value if two weeks late. Waiting to coincide with spray topping can be convenient but possibly too late.

The specific TIMERITE® date for a

property can be obtained by calling the Australian Wool Innovation Limited Helpline on 1800 070 099 or by going on line at www.timerite.com

TIMERITE® was developed by CSIRO and is supported by AWI.

Illustration: Victoria Dept. Environment & Primary Industry

Paraquat has the edge for Spray topping

Spray topping has always been an excellent weed control tool in the pasture phase. Even if weeds have been controlled by selective herbicides applied earlier in the season, it is a good idea to follow up escapes from this application for the sake of resistance management.

Also for the sake of weed resistance, it is a good idea to take the opportunity to use Paraquat and give Glyphosate a break.

The advantage of Paraquat is that it can be applied later than Glyphosate when weed seeds are in the dough stage.

Later application of Paraquat allows more time for the seed-set of legume pastures, thereby causing less damage compared to Glyphosate applied at its earlier optimal time.

There are exceptions to this, like Cadiz Serradella where early applications of knock-down spray is best.

Preferred Weed Stages for Spray-topping

	Glyphosate	Paraquat
Annual Ryegrass	During flowering & when all tillers are in head	Most heads have seeds in dough stage
Barley & Brome Grass	When seed heads emerge & before dough stage	After flowering in the dough stage
Silver Grass	Early head stage	Prior to haying off

The preferred approach prior to spraying is to heavy graze targeted paddocks and remove after 2-3 weeks for an even head emergence. Then heavy graze post application to reduce emergence of late tillers.

It would also be a good strategy to plan two applications of Paraquat for targeting various weed species at different growth stages - especially if low stock numbers. The suggested rate of Paraquat 250 for spray topping is 400ml/ha plus 0.2% wetter.

At current costs this is approximately \$2.50/ha.

Paraquat works better if applied late in the afternoon, on overcast days or at night because of better translocation of the chemical.

If Glyphosate is used the recommended rates are 250-360ml/ha; generally higher rates for ryegrass. Glyphosate does have the advantage of maintaining better pasture quality over summer.

4Farmers offers an out for your drums

Are empty chemical drums cluttering your property?

4Farmers clients can be free of the burden of mounting piles of empty chemical drums because we offer a convenient means of disposing all 10L, 20L, 110L and 1000L containers supplied.

For all 10L and 20L containers, 4Farmers pays a levy to drumMUSTER.

This enables the drums to be returned to designated collection points after they have been properly rinsed of their contents.

The drumMUSTER levy is not compulsory for all chemical suppliers - so don't count on having the right to dispose of all your drums if you have purchased from a supplier who hasn't chosen to pay the levy.

Drums larger than 20L cannot be returned to drumMUSTER even though the label might

have a drumMUSTER logo.

This has come about because the drumMUSTER logo has been incorporated into the 4Farmers product label and the same label is shared over all drum sizes.

All 4Farmers 110L drums can be accepted back by the distributor or the point from where they were purchased.

Again, you cannot count on doing the same with all similar size drums from other suppliers. Some suppliers have their own fleet of drums that are not recyclable or permitted back by drumMUSTER.

For 1000L IBCs, 4Farmers has endeavoured to exclusively use Schutz containers which can also be managed in a recycling system.

If you have any queries on returning or disposal of 4Farmers containers, please don't hesitate to contact head office.



For 4Farmer clients there is a recycling alternative for most chemical drums

Are you aware of your exposure to gaps in APVMA legislation?

While the repeal of legislation requiring re-registration of older generic products is celebrated, 4Farmers believes there are several other potential improvements in APVMA legislative reform that have been overlooked.

These are in regards to quality of chemicals and the protection of chemical standards.

Chemical products can be legally used if they're registered or have been issued with a permit for a specific purpose.

To hold a chemical permit there are qualifications to be a "fit and proper" person. In contrast a registrant of a product does not have to undergo scrutiny - could even be living in jail.

Not only could the registrant be living in jail but there is no compulsion to maintain any particular quality standards. For example, a requirement could be made to sample imported product and to do basic quality tests locally rather than rely on overseas paperwork.

Should there be a problem with contamination of a product there's no guarantee the supplier has any product insurance or assets behind them. The supplier could simply be a shelf company, here today gone tomorrow, and no comeback.

At least if the chemical you used was from a familiar Australian supplier you might feel that the company had moral or commercial obligations to honour, or there was a chance you could pursue the company if there was something wrong.

In the case of a foreign registrant you don't even have that. A foreign holder must have a nominated agent to act on their behalf but there is nothing they are obligated to offer. A nominated agent could just as easily be someone with nothing to lose, perhaps a street person at a homeless shelter.

False registrations

This leads us to another failing of the APVMA legislation which is false registrations for overseas products.

A simple screen would be to require all factories of chemical products to be inspected and authorised.

In spite of clear evidence of bogus factories, the APVMA feels its hands are tied and does not want to apply compliance in a foreign country. If an inspection was a requirement of registration then there is no reason the APVMA should not receive a welcoming invitation as it would give accreditation.

These shortfalls demonstrate that farmers cannot trust government legislation to protect them from dodgy chemicals and traders. For this reason farmers are best served by sticking with local trusted brands like 4Farmers.

4Farmers formulates many of its own product and has lab facilities to undertake thorough testing of all products by a team of qualified chemists.

4Farmers stands by and guarantees all of its products.

An insight into world supply and prices for farm chemicals

Glyphosate

At time of writing the indicative world price for Glyphosate TGAC 95% was approximately US\$4.90/kg CIF Australia.

At this price level for TGAC a reasonable retail benchmark for formulated Glyphosate 450 is in the mid to high AUD\$4's.

For a sense of perspective: This price is on the lower end of the historic Glyphosate range. Twelve months ago Glyphosate TGAC was around US\$7.50/kg. Its long term peak in May 2008 was approximately US\$14/kg while the lows in recent history have been down to US\$2.50/kg.

Fuelling the high price 12 months ago were the tougher environmental laws introduced in China.

Their imposition has not caused disruption to supply as thought likely. It is interesting to note that the first round of investigations passed only four factories.

A second round of inspections has commenced to put more pressure on manufacturers to clean up their act.

There are reportedly only about 25 "real" manufacturers in China out of about 125 registered.

Longer term, it's possible the tighter

environmental laws will further reduce this number and reduce competition.

Another reason for prices peaking in December last year was that the Chinese work on a financial year that closes at the end of December. It suited suppliers to clear high cost stock before the close of this period.

At the present price level, suppliers are claiming that margins are not much above their costs of production.

This has led to smaller producers ceasing production.

At the moment world demand is in a quiet period but the consensus view is that the glyphosate price will firm as world demand increases along with the possibility of tighter raw material supplies.

Paraquat

Formulated Paraquat 250 after peaking in the early half of the year at US\$4.50/L CIF has dropped to just under US\$4/L.

The price 12 months ago was under US\$3/L, however, it is not anticipated to fall this low as some of the major producers have reduced their capacities or arranged yearly maintenance to keep the price stable.

Trifluralin

Trifluralin TGAC 96% was available early this year for approximately US\$4/kg.

At present there are no supplies available in China and quotes are being held off until September when the price is expected to be somewhat higher.

The Australian market is estimated to consume 12-15M litres of formulated product requiring about half the quantity of TGAC. Last year China reportedly supplied only 3M tonne of TGAC suggesting the supply chain is relatively low on stock.

Phenoxies

Phenoxies have remained firm in price because environmental controls on factories have impacted production.

Price levels are generally higher for all phenoxies because of demand in particular from South America over the recent year.

Production is quiet in factories of all products this time of the year and they often shut down for maintenance in what is the hottest part of the year. The synthesis process of these chemicals normally comes hand in hand with a lot of heat so the combination of these factors is a dangerous recipe for an explosion.

Your order is just a phone call away!

4FARMERS can supply chemicals to anywhere in Australia

Simply call your local 4Farmers distributor – or if there's no distributor in your area call the head office – so easy!

Head Office 1800 038 445
www.4farmers.com.au

