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Storing grain is not 'set and forget' management

Loading grain into your silo is not the end of the management process, just the start. Storing grain is like investing in a bank account except YOU have to apply sound management principles to ensure a good return on your investment!

Hygiene is the most important investment strategy

Cleaning up spills and cleaning out the grain handling equipment is the first priority, immediately harvest is complete. Feed the spills out or turn the sheep into the silo yard – don't rely on the cockies – they do a terrible clean up!

Cleaning the residue out of the grain handling equipment and then puffing Dryacide® through is very good move. Dryacide® gives you 12 month plus protection from invading grain insects that fly around in summer looking for a home and food. You'll need about a kilo of Dryacide® puffed through you header and fastest way to apply it is with a 'BloVac' (venturi type of air gun). Don't forget field bins and augers.

Insecticides such as Fenitrothion give you three month, protection at best before they lose their effectiveness. Do not apply close to harvest unless you wash it out of the equipment after about two days. There is a chance that grain will pick up some of the Fenitrothion which may then be detected by one of our overseas customers. You must give it plenty of time to dry out and start to degrade, at least two months.

Fumigate for profit

If you want the best possible return from the grain out of your silo, the management process starts long before harvest by checking the ability of the silo to retain gas. However the good news is that you can still replace faulty rubber seals when the silo is full because they are usually independent of the grain control system (except slide plates of course)

A silo that has poor rubber seals will lose gas phosphine gas (Phostoxin, Quickphos etc.) almost as quickly as it evolves, sucked out of the silo by the wind causing a 'chimney effect'. Checking the silo by doing a pressure test when it is full is also possible and often easier because of the temperature stabilising effect from the grain. The yellow label on the side of a sealed silo will give full instructions on the pressure test but it is a very simple procedure with a standard farm compressor. The job is easily done using a direct connection to a tubeless tyre valve (minus valve) or using a BloVac 'venturi' type of air gun. (see pic)

Always fumigate when you close the lid on the silo after harvest, although your hygiene may be very good there remains the risk that grain insects have flown or walked into your new grain.

Always assume there will be a few insects in the silo and eliminating them now will save any nasty surprises in March!

Insert a DAFWA/CBH copper Phoscard to indicate the fumigation has been successful, it will turn green if the gas has reached the full concentration in the farthest extremities of your silo.

Apply two tablets of phosphine per tonne of silo capacity no matter how much grain is in the silo – you are fumigating the air space not the grain.

A failed fumigation is when there has been insufficient gas penetrating to ALL parts of the silo to control ALL life stages of the insects. Surviving insects are most likely to have a weak resistance to phosphine, do this too often and you could create STRONG resistance which will impact on you ability to control the insects in the future. The knock on effect is that this may also start to affect the way CBH control grain insects with resultant cost penalties to the industry and therefore returns to all grower members.

Check your investment regularly

Keeping an eye on the monthly interest returns is the mark of a good investment manager and so with grain, making sure insects haven't survived the fumigation or there is no moisture migration to the headspace of the silo is very important. That means climbing to the top (wearing safety harness) or outloading some of the grain. You are most likely to find problems appearing first in the peak of the grain stack.

The Department of Agriculture and Food in conjunction with CBH conducts free on-farm workshops on quality grain storage and correct fumigation techniques. Get a few neighbours together for an informative session talking about 'Quality Grain Storage' techniques including alternatives for insect control in unsealed silos. And there will be a demonstration of a re-seal and pressure test of a sealable silo.

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