

Protecting the investment in stored grain

Grain in the silo is like having money in a term deposit at the bank and you expect some interest at the end of the term. The difference is that in this case YOU are the Manager so if the interest paid is not what you expected was there a better management strategy you could have employed?

Looking after the investment really comes down to three basic rules, keep it clean, keep it cool and keep out the insects.

Keeping it clean really means not only putting that nice clean grain in a nice clean silo but also cleaning up the inevitable spills. Leaving it to the parrots is not good practice and a thunderstorm on the grain piles is an open invitation to weevils to set up a base camp ready to assault the unsealed silos.

Keeping it cool is another way to provide an uncomfortable bed for weevils. Most grain is harvested very warm and dry in the NAR and so should be safe in a sealed silo but if you are storing in unsealed silos, dry and warm grain is vulnerable to insect attack. Aeration is a very useful tool not only for handling a moist load after a thunderstorm or air moisture if you are near the coast but will enable you to make good use of your old unsealed silos for a low outlay. About \$750 will provide you with a DIY kit that is adequate for a silo up to 75 tonnes.

Keeping out the insects or keeping them in low numbers with aeration is the ultimate aim to ensure you get a return on your investment. Before harvest you should check all rubber seals on base seal plates and top lids and replace if they are damaged or squashed. But after harvest make sure they are put in place straight after loading and fumigation. Then leave them in place except for a monthly check at the top of the silo to be sure the grain smells good and the fumigation was effective.

Fumigate now!

Fumigation with phosphine (Phostoxin) must be done as soon as you are ready to lock up the silo. There is always the chance that a few weevils have flown in to the auger boot as you were loading and eliminating them now will ensure no damage is done. Let's not forget from previous articles that insects damage grain by releasing some of the water locked in the grains and that can accumulate in the headspace and activate the moulds.

Recently I have come across farmers continuing to use phosphine in unsealed silos and simply chucking it up the auger. This is now an off label use on both counts but even more importantly is a COMPLETE AND ABSOLUTE WASTE OF TIME AND MONEY! In fact you would do as much good by simply throwing a \$20 note up the auger and it would save you the effort of driving in to town to buy the phosphine!

Gas is liberated from the tablets and is lost immediately in an unsealed silo and since there are very few insects in there at that time is unlikely to kill anything. Putting phosphine tablets up the auger has been outlawed because the powder left after the gas is liberated remains toxic and often surplus grain will be traded (sometimes several times) and there is no guarantee where it will end up, it could become a foodstuff.

AND most importantly do not use phosphine later when you discover weevils in your old unsealed silos – resistance is increasing and we have now discovered two cases of strong resistance in rust red flour beetle in the wheatbelt.

PROTECT PHOSPHINE FOR THE FUTURE