

## **Keep an eye on your investments**

If you invest on the stock market or into a bank account you need to keep an eye on it to make sure it will return some profit. Grain in silos is your investment for next years crop or for sale as part of your income stream but weevils could be eating away at those profits as you are reading this!

Have you checked the silo recently and how did you check it? Opening the top of the silo and having a sniff is one of the best ways to tell if things are not well but long before the tell tale odour appears insects are quietly chomping away on the grain and having a party in the breeding department!

The best way to find insects in the silo is with a pitfall trap pushed into the peak of the grain. This can be as simple as a drink can with top cut off and fly wire taped over it, more sophisticated traps are available but difficult to access. Insects move around the grain and will fall in – a little vegetable oil in the bottom ensures they won't get out.

Picking up a handful of grain is a very poor way of finding insects and waiting until you see them moving around means that the population is probably around 1000 – 2000 insects per tonne.

The grain must be screened to be sure of finding insects so whether you drop some out of the bottom outlet or scoop it off the peak, use a grain sieve it to shake the insects through into the tray. (See photograph) Spearing the grain is the best technique but you must take multiple samples to be sure of accuracy, just like sampling for quality.

### **Found insects?**

All insects in grain are bad especially in unsealed silos because they can breed up and fly or walk out to other grain stored nearby. Your decision to control them depends on the sealability of the silo and the fate of the grain. If the silo is not sealable then don't use phosphine because this will select the insects with a tolerance to phosphine. Do this multiple times and you are heading to a higher level resistance factor.

If the grain is to be used for feed on farm it may be a better choice to feed it out first if it's in an unsealed silo. If it's to be sold off farm then insects must be eliminated with phosphine which is the only available insect control for whole grain but of course only in a tested sealed silo.

### **Is the sealed silo still sealed?**

Most farms have factory sealed silos, but are they still sealed? Silos will hold gas only if the rubber seals remain in good condition. It is a relatively simple and inexpensive task to replace rubbers and is essential before using a fumigant such as phosphine.

The rubber to reseal silos is readily available from industrial rubber suppliers. (See Yellow Pages) Strip off the old rubber from lids and seal plates and glue new rubber in

place with a rubber adhesive for an instant job. If using silicone leave the lids off for 24 hours to cure. Test the silo using a farm compressor and read the yellow label on the side of the silo for the correct pressure times.

**Applying the phosphine.**

Apply the phosphine tablets (or Bagchain formulation) in the headspace of the silo. It is good practice to lay the tablets in a tray so that the tablet residue does not fall into the grain. Use a wide tray so that the tablets are spread out. The powder remains toxic and if concentrated into a trough could affect the livestock consuming it or could be blown up into the face (and lungs) of the person outloading for seeding.

For further information contact Chris Newman, Department of Agriculture and Food, Forrestfield. 9366 2309 or 0428 934 509

Captions	Check for grain insects using a sieve
	Put phosphine tablets in a tray in the headspace