



Grain storage

Managing pests and grain quality

With harvest completed after a hot and dry finish to the season and a long hot summer predicted, growers need to take some extra care with their grain storage. It is really important to get the basics right over the next few months and this will safeguard the quality of the grain in storage.

These basic steps will help to maintain germination and vigour of next seasons planting seed and preserve the quality of the grain held for stockfeed or future sales.

- **Monthly checks:** sample grain from the top and the bottom of silos, check the quality and sieve for insects.
- **Storage record:** keep a note book or spreadsheet to record any pests detected and any grain treatments.
- **Aeration:** ensure that the aeration cooling fans are operating correctly to keep grain temperatures below 23°C.
- **Grain protectant:** consider treating grain held for longer than two months. Check the product label and buyer requirements before treating.
- **Hygiene:** clean out any grain residues from empty storages or equipment and treat with DE dust eg. Dryacide®.

If storage pests are detected during any of your monthly inspections, it is important to identify the insect correctly and record them in the storage records.

On-farm Product choices

As we no longer have Dichlorvos® available for on-farm use, fumigation with phosphine will be the first choice for pest control. For any fumigation it is essential that the storage is gas-tight. The phosphine gas must be held at a high concentration (200 or 300 ppm) for 7 to 10 days to control all stages of the insect life cycle. Growers should seek advice if unsure of how to achieve an effective fumigation result.





Grain storage continued

Grain with low moisture content

For this year, one additional issue to consider when fumigating is the low moisture content of the grain harvested this season. If grain moisture content in storage is below 9% then the phosphine label 'restraints' advises not to use the fumigation tablets. The dry grain does not generate enough humidity in the silo headspace air to cause the tablets to react and generate gas over the normal 7 to 10 day fumigation.

If grain moisture content is very dry, between 9.0 and 9.5%, an option may be to place an open 20 litre drum with 7 litres of clean water near the tray of dry tablets. Keep the drum at least 1 or

2 meters away from the tablets. Put an old bath towel into the water drum and draped over the edge, this will help add a little humidity to the headspace air. Never add water directly to tablets as this is dangerous and results in a poor fumigation. Always follow the label directions.



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