



Stored grain insect control - future challenges

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Graingrowers have new marketing opportunities available since deregulation of the grain market.

Many growers use on-farm storage as part of their grain marketing strategy

► Farm storage trends

About one third of grain growers in a 1991 ABARE study planned to increase permanent farm storage capacity. The main reason was to increase marketing opportunities.

A 1991 *GRAINSAFE* survey of graingrowers in Queensland found about a third planned to increase on-farm storage capacity by 1996. Much of this would be used for longer term storage.

► Growers views on insect problems

Growers in the *GRAINSAFE* survey confirmed that insect infestations increase with storage duration. About half had problems in grain sold within three months of harvest, increasing to 60% when grain was sold up to six months after harvest.

Most growers in the *GRAINSAFE* survey preferred non-chemical methods to control stored grain insects.

Estimates of costs due to rejection or downgrading of loads by buyers/handlers varied from \$5.00 to \$30.00 per tonne.

► Buyers and handlers views

Only one-fifth of buyers/handlers found insects in grain received direct during harvest. Twice as many found insects in loads from farm storages.

About 60% believed that insecticide residues were already a problem. A further 20% believed that residues would become a problem.

► Export and domestic markets

Some grain held on farm is for stock feed or seed. But most finds its way on to the market eventually.

Most domestic and export grain markets have stringent standards on insecticide residue levels

Growers must control insects in grain destined for most markets without leaving unacceptable levels residual insecticides.

► Resistance of insects to insecticides

Stored grain insect are becoming increasingly resistant to both contact insecticides and to fumigants.

Useful insecticides for stored grain insect control are steadily disappearing.

In the past, the solution to resistance problems was different insecticides or fumigants. But stored grain insecticides are both difficult and expensive to develop and few are in the pipeline.

► *GRAINSAFE*

This series of *GRAINSAFE* bulletins covers stored grain insect control.

Alternatives to traditional stored grain insect control methods are available. Graingrowers and handlers must consider these options within their pest management programs. ■