

Producing and Marketing Clean Grain

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Regulations have been changed so that grain with certain types of contamination cannot be used either for human or animal consumption. Thus, in addition to the loss in weight and food value, contaminated grain could be subject to diversion from food or feed uses in the coming season. Accordingly, grain producers and handlers must prevent both the contamination of grain and the mixing of contaminated lots with clean lots, which could result in extensive losses.

Grain often becomes contaminated after harvesting, usually due to careless or improper handling. Problems of proper handling of grain are greater when production exceeds the normal capacity of storage and handling facilities. Temporary, additional storage facilities usually increase the possibility of contamination by insects, birds, rats, and other pests. Older storage facilities, placed back in use, often do not provide adequate protection of the grain to meet today's clean-grain standards. On-farm storage facilities should be examined before the storage season to be sure that they meet minimum requirements for protecting the grain.

Clean Grain Protection Begins Before Harvest

Quantities of dust or old grain around the storage area can be sources of insect infestation for the new crop, and should be removed. Bins should be swept clean and sprayed with a recommended insecticide. Market grains should be stored as far as possible from feed bins.

Spilled grain, feed, loose boards, and litter around the storage area tend to attract and harbor insect and rodent pests that can infest the grain. Removing their shelter and feed that attracts them will make insect and rodent control much easier.

Repair walls, roofs, and foundations of storage bins. Cracks or holes provide access for rodents. Replace broken windows and screens to exclude birds.

Combines and truck grain boxes often are roosting and nesting places for birds and rodents in the winter season. During this time, sufficient debris collects to contaminate several loads of grain. Equipment should be cleaned prior to harvest to avoid this source of contamination. Trucks used to haul livestock or fertilizer should be washed clean with a high-pressure hose before being used for hauling grain.

Store Only Dry Grain

Storing grain with a high moisture content, green weed seed, or broken kernels favors development of molds and insects during storage. On-farm storage fa-

cilities usually are not equipped with forced-air ventilation equipment or elevators to stir the grain while in storage. Grain going into on-farm storage must be as dry or drier than that being accepted by commercial warehouses.

Protecting Clean Grain

After grain is placed in storage, make frequent inspections to be sure that the grain is in good condition and that insects and rodents are excluded. If storage problems develop, take corrective steps immediately, before extensive losses occur.

If the grain is to be stored for a considerable period, it may be advisable to use a grain protectant to hold down insect infestations.

Information on recommended materials for bin spraying, grain protectants, and rodent control is available through local county Extension offices.

CLEAN GRAIN CHECK LIST

Harvest and handling equipment

-Are combines and trucks thoroughly cleaned before harvest?
-Is sufficient storage available for the current crop?

Storage bins

-Is the storage bin weatherproof? (Check roof, walls, windows, and doors.)
-Is the floor moisture-proof?
-Are the windows, doors, and ventilators screened against birds, rodents, and pets?
-Is the area around the bin free of spilled grain and debris that would attract and provide cover for rodents and insects?
-If rodents are present, are they being controlled?
-Is the bin thoroughly swept down and sprayed with an approved insecticide prior to storage?

Handling practices

-Is grain below 12% moisture when stored?
-Is the bin closed against weather, rodents, and birds after being filled?
-Has a grain protectant been applied?
-Is stored grain checked monthly for deterioration or insect infestation?



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