Store Grain In Air-Tight

Storage pests can destroy 20-40% of your Grain after harvest. This is worse at the coast because of the wet, hot and humid weather.

Keep pests away from your grain!

There are many pests that damage stored grains. Stop them getting into your container

1. Storing maize only when it is dry.
2. Checking for any pests. The 4 most common are weevils, moths, bruchids and larger grain borer (see pictures). If you see any signs of these pests DRY AGAIN, then store.

Storage method

- Traditional crib
- Air-tight plastic (water) containers
- Polythene wrapping
- Ash
- metal drums
- Burning of Lantana (mshomoro)
- Burning pepper
- Burning neem leaves

Which is the best method and why?

Airight containers are the best, as chosen by Hers at the coast, because they

- Keep your grain safe from insects and pests.
• Keep grain dry and safe from wet weather.
• Keep seed healthy so that it will germinate when you need to plant it.
• Do not need pesticides or other chemicals.
• Are easy to obtain, are cheap and last a long time.

Who should use containers?

• Farmers with small plots (for seed or food).
• Small traders who sell seed and grains.

How to use air-tight containers

• Harvest the grain when mature and dry.
• Shell the maize and thresh the pulses and winnow.
• Dry until grain rattles when it is shaken.
• Look at grain closely and if any weevils are seen dry again until there is no sign of them.
• Dry the container. No wetness should be seen inside the container.

Hatari!! Be Careful!!

• Make sure that your grain is dry (You MUST hear the rattling sound!).
• Clean and dry your containers before loading.
• Harvest early to stop pests attacking the grain in the field.
• If you want to use grain for seed the next season then select and shell the middle bit of the cob to get top quality seed.
• Do not use cracked containers since they will let the damp air in.
• Hybrid grains cannot be conserved for seed. Load into the container until it is full to the brim and close tightly.
• Store in a cool dry place.
• Don't leave the container open for long when you are using some grain.
Examples of insect pests

Weevils

Weevils eat whole cereal grains and can cause big losses. The weevils start eating the grain in the field and can move into the container with the grain.

Moths

Moths come into the store with the grains. The female scatters her eggs over the grain and the larvae eat it. In large scale storage, this pest usually dies out before the need for pest control.

Bean Bruchid

The pest mainly attacks kidney beans, where it lays its eggs loosely. Infestation may begin in the field where eggs are laid on the remaining pods. The larvae develop solely within the bean and are not normally seen. The adult emerges from a neat ‘window’ cut in the seed coat.

Cowpea bruchid

These beetles attack seeds of cowpea and green grams and other pulses. Eggs are firmly glued to the seed. The larvae develop solely within the seed and so are not normally seen. The adult eventually emerges from a neat window cut out of the seed coat. Infestation may begin in the fields where eggs are laid on the maturing pods.

Larger grain borer

The larger gram borer (LGB) is a serious pest of stored maize and cassava, though it is sometimes found in the field. The adults bore through the grain and make a lot of dust. The larvae grow inside the grain, hidden in the adult tunnels.

Compiled by
VM Kega, WK Malinga, A Blocland
EA Wekesa, W Mwinga, JR Onyango and P Chege
KARI Headquarters Library
resource.center@kari.org
Kari/MTWAPA po Box 16 Mtwapa