## Larger Grain Borer on Maize

*Prostephanus truncatus* (Osama)

### Prevention
- Plant resistant maize varieties e.g EMB 0702 for medium altitude, MTPHE 0701, M/0702 coast region.
- Harvest early, 3 weeks after attaining physiological maturity.
- Clean the store thoroughly between harvests. (See Direct Control)
- Remove and burn infested residues before the new stock is stored.
- Immerse used sacks in boiling water and dry to eliminate residual infestations.
- Practice crop rotation with legumes (beans, cowpease) and vegetables (Kales, spinach)
- Thresh maize before storing and avoid breaking of the grains

### Monitoring
- Inspect stored grains weekly for signs of infestation.
- Look for small (4mm) beetles with a uniform dark brown to black colour roaming on stored grains.
- Look for exit holes on grains.
- Look for tunnels through stored maize grain resulting into large quantities of dust.
- Consider direct control when 1 insect is noticed.

### Direct Control
- Place sticky traps in susceptible areas in the store.
- Sundry and sieve infested grains before packing.
- Use metal silos and/or hermetic bag for storage.
- Spray store surfaces well before use Pirimifosmethyl (Actellic 25 EC – 200ml/10Lt water).
- Dust grains with any of the following pesticides: Pirimiphos methyl1.6%+Permethrin 0.3% (Actelic Super 50g/90Kg Maize, Malathion + permethrin (Skana Super 50g/90 Kg Maize) or dust Fenitrothion + fenvalerate (Sumicombi 1.8%- 30g/90Kg Maize). Spinsad (spintor dust – 50g/ 90Kg).

### Restrictions
- WHO toxicity class II (moderately hazardous);
- PHI 4 Days.
- MRLs 7mgs/kg
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- Malathion -WHO class III (Slightly hazardous)
- MRLs-0.05mg/kg
- Permethrin- WHO class II (moderately hazardous)
- MRLs-2mg/kg
- Spinsad-Class III (slightly hazardous).

- When using a pesticide always wear personal protective equipment. Follow the instructions on the product label, such as dosage, timing of application, restricted re-entry interval. Do not empty into water drains.
- Clean the grains thoroughly with water before consumption.
- Always consult recent list of registered pesticides by PCPB