Recognize the problem
The maize weevil is an important pest of stored maize, as it is capable of boring into maize grains resulting in more damage and significant yield losses as well as poor quality grain. A single female weevil produces 150-400 eggs over a period of 4-5 weeks. There may be 3-5 weevil generations a year each taking an average of 4 weeks to complete depending on temperature and maize variety.

Background
The use of chemicals in treating maize grains has raised serious health and safety issues, thus there is a need for other control methods that are environmentally friendly and safe. The use of locally available inert materials such as ash from wood or rice husk can offer effective control of the maize weevil in storage. The insects are irritated by the high levels of silicon and the needle-like particles in the rice husk ash. The ash acts as an abrasive for the outer body layer of the weevil, causing loss of body water and ultimately leading to the death of the weevil. The grains also become unsuitable for the weevil to feed, move and multiply on.

Management
• Make or collect ash from wood or rice husk
• Sieve ash using a fine wire mesh to obtain powder
• Mix powder thoroughly with the grains which must be well dried
• Apply rice husk ash at a rate of 0.5-1% (1/2 – 1 kg per one maxi bag of 100 kg maize) to the grain weight
• Apply the wood ash at a rate of 1% (1 kg per one maxi bag of 100 kg maize) to the grain weight
• Put grains in clean and undamaged sacks and put them on a wooden platform for storage in an enclosed room
• The grains can be stored for about 90 days after which they must be sun dried and re-treated for effective storage
• Better results will be obtained if other cultural practices are used, such as planting tolerant varieties, selecting only uninfested materials for storage and cleaning the store by removing and burning infested residues before storage

Scientific name(s) > *Sitophilus zeamais*

The recommendations in this factsheet are relevant to: Ghana