Trapping mice with water buckets in maize fields

Recognize the problem
Rats and mice ("Panya pori" in Swahili) are small animals that can cause considerable damage to the maize cobs and plants. They eat the maize cobs, making the maize of poor quality. Up to 90% of maize yield can be lost at high rat and mice infestations.

Background
Rats and mice have high birth rates. When water and food, such as maize crops or plant wastes are available, their populations can rapidly grow leading to high numbers. Rats and mice have a good sense of smell and therefore easily find crop food. They are good climbers, and can reach maize cobs or fruits. Rats and mice are not good swimmers and can therefore be trapped in water-filled buckets placed into the ground of fields. Many buckets must be used across and nearby fields because there might be many rats and mice.

Management
• Use common household plastic or metallic water buckets.
• Dig holes as deep as the height of the buckets, which is usually about 50 centimetres.
• Dig holes across and nearby the field in 10 m distances to each other.
• Fill the buckets half with water and place each one into a hole, so that the upper edge of the buckets equals the soil surface.
• Place some maize bran or cereal bran onto the ground around the edge of the bucket.
• Rats and mice will be attracted by the smell of the bran and start feeding.
• As they feed and compete for the bran, they are likely to fall into the water buckets and will be drowned.
• High numbers of rats and mice can be trapped, thus buckets need to be checked every second day.

Scientific name(s) > Mastomys natalensis

The recommendations in this factsheet are relevant to: Ghana, Kenya, Tanzania, Uganda

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Edited by Plantwise.

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