Sweet potato weevil control using Sunnhemp

Recognize the problem
The sweet potato weevil is a serious insect pest of sweet potato tubers. An adult weevil is a bit more than ½ cm long, has a shiny slender body and a long nose. The legs and head are red and the rest of the body is bluish-black. Larvae are the destructive stage of the weevil. The larvae are 2 to 6 mm, C-shaped, legless and dirty-whitish.

Background
The adult weevils deposit eggs close to the stem when feeding. Eggs hatch into larvae. The larvae bore holes and tunnels into sweet potato tubers making them unmarketable. The sweet potato weevil can affect the tubers both in the field and during storage. Affected tubers usually have holes in them and are spongy and dark. The affected tuber develops a bitter taste and bad odour and therefore cannot be eaten. The losses due to sweet potato weevil can reach up to 90%. Sunnhemp is a leguminous plant with a repellent effect to sweet potato weevil. The use of Sunnhemp does not negatively affect sweet potato yield. It suppresses weeds and improve soil fertility.

Management
• Plant sweet potatoes in well prepared ridges about 30cm high and 60cm wide
• Sunnhemp seeds can be obtained, for example, from the Sunnhemp Seed Bank, Postal Office Box 1, Peramiho, Tanzania
• Sunnhemp seeds from a previous season can also be saved to be used in following cropping seasons
• Sow Sunnhemp seeds on the ridges of the sweet potatoes 1 month after transplanting
• Cover the seeds with a little soil to improve germination
• 15 kilograms of Sunnhemp seeds are enough for 1 acre
• If too many Sunnhemp plants emerge and grow over the sweet potatoes, uproot some of them to leave about 30 to 40cm between Sunnhemp plants
• Avoid very dry condition as this may cause the soil to crack, allowing weevils to enter the soil and attack the tubers
• Leave Sunnhemp to grow until the harvesting of sweet potatoes
• Cut the Sunnhemp plants before harvesting is done
• Avoid storing weevil-damaged tubers to prevent the weevils multiplying and continuing their attack during storage

When using a pesticide, always wear protective clothing and follow the instructions on the product label, such as dosage, timing of application, and pre-harvest interval.

Scientific name(s) > Cylas formicarius

The recommendations in this factsheet are relevant to: Tanzania

Authors: Hosea D Mtui, Rose Ndomba, Jubilant JN Mwangi
Sokoine University of Agriculture
email: mtuihosea@yahoo.com

Edited by Plantwise

Plantwise is a global initiative led by CABI