Sweet Potato Insect Pests

Sweetpotato Weevil
*Cylas formicarius* (throughout tropics) and *Cylas puncticollis* (Africa)

**Damage symptoms**

Small and scattered feeding holes are occasionally present on the leaves. The surface of the storage roots are scarred or chewed. Internal portions of the roots are tunnelled out and some areas maybe soft. Rotting may occur and a strong terpene smell may be evident.

**Insect characteristics**

Chewing mouthparts. Adults are brown to black with heads elongated into a snout. They appear to have typical piercing-sucking mouthparts but don't. Larvae are white with brown heads. They are fat, grublike and legless.

**Where to look**

Adults are commonly found on the foliage, but they quickly drop to the ground if disturbed. Select storage roots that appear soft, smell, or have external scarring or small darkened holes. Cut these open and look for tunneling and grublike larvae.

**Technical information**

Continual generations can occur even in temporary storage conditions. Female weevils lay eggs singly in the stem or storage root. These insects pupate in the stem or root. Infested sweet potato develops a bitter taste and is not
marketable. No alternative hosts outside the morning glory family have been reported for the pest.

**Control**

Several steps are needed to control the weevil:

- Uproot and burn all morning glory plants in the vicinity of the field.
- Use clean cuttings. The ends (25-30 cm portions) of tender vines are normally used to plant a new crop. These distal tips are free of weevil eggs and larvae. However, older portions of vines may be infested. Never use tips longer than 30 cm to plant a new crop.
- Soak cuttings in an insecticide solution. Follow the instructions on the label of the insecticide to prepare the solution. Soak cuttings for 5-10 minutes. Drain excess solution in the container. Use the same solution again and again to dip more cuttings. This is a very inexpensive and effective way of cleaning the cuttings of weevils. The insecticide treatment will also protect the crop in the field for up to one month from any new weevil infestation.
- Regularly cultivate the soil to close cracks. Weevils travel through land cracks to gain access to storage roots and lay eggs. These cracks are caused by the underground storage roots becoming larger and larger. Land cracks may also be caused by lack of soil moisture, which is common in the dry season.
- Grow sweet potato in a rotation (rice or sorghum are often used). This rotation will help break up the cycle of the weevil (and diseases, too). If you must plant sweet potato continuously, remove all debris and even small pieces of root from the previous crop.

Pheromone traps are useful in monitoring weevil populations, but this technology is expensive, not widely available, and not necessary.