



# MAURITIUS SUGAR INDUSTRY RESEARCH INSTITUTE

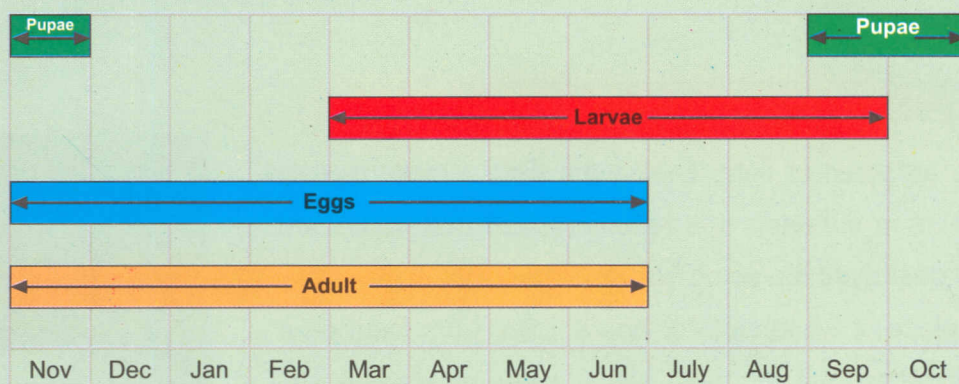
## Recommendation Sheet

October 2002, No. 131

### The sugar cane white grub *Heteronychus licas*

The white grub *Heteronychus licas* is an occasional insect pest of sugarcane. It feeds on the underground parts of the plant.

The insect has an annual cycle as shown below:



### Symptoms of damage in sugar cane

Both adults and larvae of *H. licas* cause damage to sugar cane.



Adult and eggs (x 1.5)



Damage caused by adult

The adults are strong fliers; it is presumed that they can fly up to 2 km. Although flight occurs in December and January only, beetles may remain in the soil up to June. They fly after sunset, usually between 7.00 pm and 8.00 pm. Adults feed at the base of young shoots, causing dead hearts.



3<sup>rd</sup> instar larva (x 2)

The third instar larva, present from May/June to September, is most damaging to sugar cane. It feeds on all its underground parts. The root system and even cane setts can be destroyed.



Root system eaten by larvae





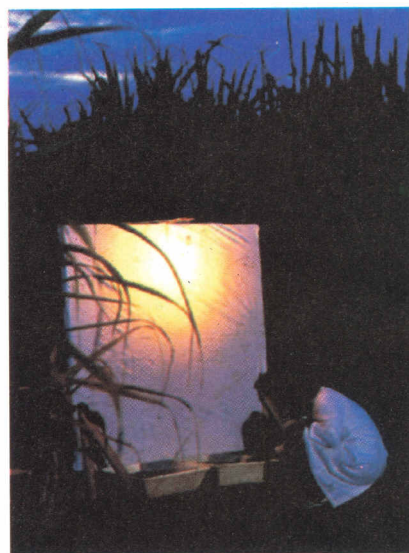


Gappy stands in an infested field

Damage by mature larvae in newly planted fields can cause gappy stands. In case of severe infestation, larvae can also be found below cane trash laid in the interrows. Sugar cane seems to be the main host. However, damage to maize, groundnut and potato, grown in sugar cane interrows, has been observed.

#### **How to keep *Heteronychus licas* under control?**

- Adults are attracted to light. During the flight period, usually after heavy rains in summer, it is recommended that adults are collected and destroyed by using simple light traps. A light trap consists of a piece of white cloth or board 1.5 x 1.5m fixed on a stand and illuminated by a light bulb, with a water tub at the base.
- Localised infestations can be controlled by drenching the soil (at 1200L water/ha) with **chlorpyrifos at 2g a.i. per litre** or **imidacloprid at 0.3g a.i. per litre**. This treatment will be more effective at the initial stages of infestation, when adults and very young larvae are present. If larvae are found under the trash, the trash should be removed before treatment is carried out.
- Where dead or dying stools are to be recruited, an insecticide application should be effected in the furrows before replanting.
- Dead stools should not be allowed to remain in the fields as they may harbour the larvae.



A light trap to collect adults

**Note: Insecticides should not be used as a preventive measure against white grubs.**