

# Banana weevil borer

*Cosmopolites sordidus*

## (Monitoring)

### Monitoring

Adult banana weevil borer activity increases during warm and/or wet weather and decreases during cold and/or dry conditions. Periods of greatest adult activity are in spring (September-October) and autumn (March-April). If blocks are suspected of infestation, trapping should concentrate on these times to determine whether chemical treatments are needed or not. Monitoring should be carried out every month, except during the colder months when the time frame can be extended to six weeks. In addition, it is advisable to set traps prior to a new planting or during the fallow period to ensure that any banana plant material has decomposed entirely, eliminating the possibility of any remaining adult banana weevil borers being present that might affect the new crop.

There are a few main methods of monitoring banana weevil borers, which are outlined below:

#### *Bait trapping*

Baits are made by cutting a fresh pseudostem into slices about 10cm thick (Figure 1). The pseudostem material selected for making baits should ideally be taken from the lower portion of the stem of freshly harvested plants. One bait is placed close to the base of each plant, with one cut surface in full contact with the ground and covered with leaves to prevent the bait from drying out (Figure 2). After three to four days, the baits are turned over and the adult banana weevil borers are counted.

#### *Pheromone trapping*

Another option for monitoring is the use of pheromone-baited traps, which contain a substance (sordidin) that specifically attracts adult banana weevil borers (Figure 3). Baits need to be replaced every 30 days, as lures run out (depending on lure concentration – read labels for specifics).

#### *Corm damage assessment*

Larval damage can be assessed by rating the percentage of tunnelling in the corm of harvested plants. The larger the area affected the higher the pressure of banana weevil borers. This monitoring is destructive and requires the cutting of plants, and is encouraged as a monitoring tool to see how known infestations are responding to treatment, rather than a diagnosis of infestations.



Figure 1 Cut pseudostem disc used for bait trapping.



Figure 2 Baits should be covered with a leaf to prevent the disc from drying out too quickly.

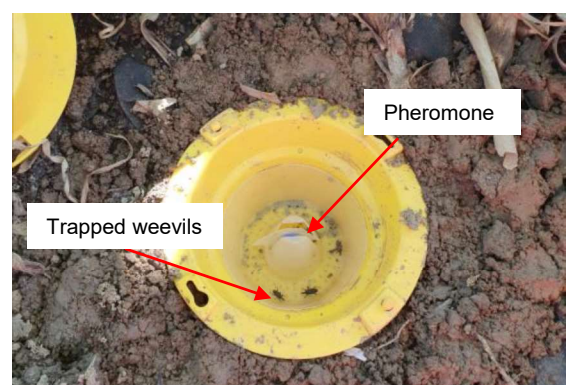


Figure 3 Traditional pitfall trap that is used with pheromones. Here the lid has been removed to count banana weevil borers.

This information is adapted from: Pinese, B., Piper, R 1994, *Bananas insect and mite management*, Department of Primary Industries Queensland