Sugar Research Australia

Information Sheet

IS13071

Butt weevil

Sugarcane butt weevil

Leptopius maleficus

Distribution

These weevils are widespread, but damage occurs only near Innisfail. Damage has been recorded in alluvial loam at Mundoo, in red volcanic loam at Mena Creek, in red schist loam at Moresby, and dark sandy loam at Kurrimine.

Damage

Damage occurs in spring and early summer. Both plant and ratoon cane are damaged. Grubs hollow out ratoon stubble and setts, make long channels into and destroy the rind, and eat the eyes and root buds. They also tunnel into and make large holes in the base of new shoots, causing 'dead hearts' and wilted shoots. Badly damaged cane will die. Grubs do not feed heavily on roots so moderately damaged shoots can recover if growing conditions are good.

Description

Butt weevil grubs are legless and slightly curled with small heads. Their bodies taper slightly towards the rear end. They are cream-yellow with a pale head and black mouthparts. Fully grown grubs are 20-24 mm long
(Photo 1).

Grubs are found in the soil, or boring in setts, stubble or shoots. Butt weevil grubs are different from weevil borer grubs which have a red-brown head and an abdomen which widens towards the rear, then ends in a sharp point.

Adult weevils are grey or reddish with many rounded lumps on their bodies. The mouthparts are on a long snout. The body is much broader at the rear end of the wingcovers than at the front end. Weevils are 16-21 mm long, and males are smaller than females.

Biology

The grub stage lasts several years. Large grubs have been kept in the laboratory for at least 1 year with little change in body size. Damage to cane is seen between June and December. Large grubs leave plants and move into the soil by January, probably to pupate. In infested fields, large numbers of weevil usually emerge in spring of the year following damage to cane.

Weevil are found in canefields between August and March, usually feeding and mating on leaves of both young and mature rattlepod. Weevils have also been seen feeding on common sida, pink flannel burr and senna leaves. They do not usually feed on cane leaves. Weevils can fly, but are easy to pick up and handle. Females need to feed on leaves for at least 2 months to mature their eggs. Up to 45 mature eggs are ready to be laid by February.

Management

Butt weevil damage is rare and of minor importance. Control of weeds upon which weevils feed will reduce insect numbers in cane.

Photo 1: Butt weevil larva.