

LEMON BORER MOTH

Cryptoblabes gnidiella Millière

1 PEST PROFILE

1.1 Distribution and status

The lemon borer moth (LBM) or honeydew moth, *Cryptoblabes gnidiella*, is a relatively new pest in South African citrus, exclusively on lemons. Thus far its presence has only been confirmed in the Eastern Cape, although reports of matching symptoms are frequently received from the Western Cape. LBM only appears to be a problem in orchards which do not receive regular organophosphate, pyrethroid or abamectin thrips sprays.

1.2 Description

The LBM adult has a wingspan of 13 to 20 mm. The forewing is whitish or greyish with two pale stripes, one or two black dots and a grey fringe along the edges. The hind wings are a shimmering milky white with black veins and a yellowish fringe. The adult female lays her eggs singly, but often in large numbers, on fruit. The eggs are oval, flattened and about 1 mm in diameter. The full grown larva is less than 10 mm in length. Pupation takes place amongst damaged flowers and fruitlets and is associated with webbing. The pupa is initially green but turns brown with age.

1.3 Infestation sites on tree

LBM eggs are laid on lemon fruitlets, usually not larger than golf ball size. Larvae hatch from the underside of the egg, thus penetrating directly into the fruit. The larvae do not penetrate very far before they either exit the fruit or are killed by gum exudation or acidity.

1.4 Damage

1.4.1 Symptoms

Once hatched, LBM eggs desiccate and become white, appearing similar to red scale white caps. Penetration of the fruit by the neonate larva is generally very superficial and is often marked by gumming of the fruit. Penetration marks are initially fairly small, but once the fruit matures, they appear as brown

oleocellosis scars, similar to those caused by leafhoppers, which can lead to the fruit being downgraded. The egg shell will almost always be noticeable in the centre of the oleocellosis scar, which will be an indication that the damage is caused by LBM, and not by leafhoppers. Severe levels of infestation can cause substantial fruit drop and a reduction in the crop. Older larvae can consume entire blossoms and pea-sized fruitlets.

1.4.2 Seasonal occurrence

LBM can be a sporadic pest on lemon fruitlets during spring and summer.

2 MANAGEMENT ASPECTS

2.1 Infestation/damage assessment

2.1.1 Inspection

After petal fall on any of the lemon crops set during the year, fruitlets should be inspected for the presence of LBM eggs. This should continue until fruit are approximately golf ball size. Inspections can be done in conjunction with scouting for other more important pests.

2.1.2 Treatment threshold

As this pest is of minor importance or sporadic in nature, no thresholds have been defined for the timing of treatments.

When fruit are infested with large numbers of unhatched LBM eggs or when there is an increase in the number of penetration marks (identifiable by gumming) on fruitlets, intervention against LBM will be necessary.

2.2 Control options

2.2.1 Biological

No natural enemies of LBM have been identified yet.

2.2.2 Cultural

There are no cultural options that can be used to influence the presence or extent of LBM infestations.

2.2.3 Plant protection products

No plant protection products are registered for the control of LBM. It is very rare that treatments are ever necessary for the control of this pest.

LBM damage has been detected almost exclusively in unsprayed orchards, indicating that this pest is highly susceptible to almost any treatment. Mevinphos, at the same rate as that registered for bollworm control, has effectively controlled high levels of LBM infestations.