



Kenya Agricultural and Livestock Research Organization

COFFEE RESEARCH INSTITUTE

COFFEE BERRY BORER (*Hypothenemus hampei* Ferrari)



TECHNICAL CIRCULAR NO. 407



For Further Information, please Contact:
The Institute Director, Coffee Research Institute,
P. O. Box 4-00232, Ruiru
Tel : +254 724 527 611, +254 733 333 060
Farmers enquiries: 0700 756 753
E-mail: director.cri@kalro.org; Website: <http://www.kalro.org>

RLS
6th revision
Sept 2016

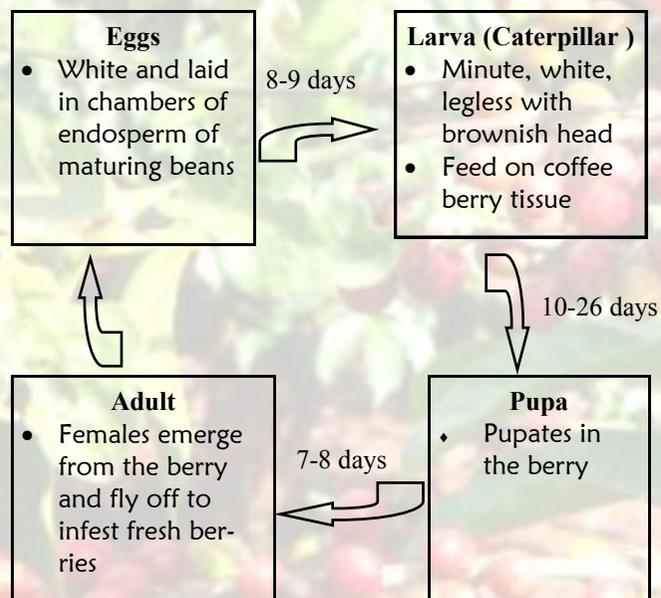
1.0 Symptoms

- One or more small round holes near the apex of large green or ripe berries.
- Damaged bean has blue green staining and contains up to 20 larvae



Plate 1 Coffee Berry Borer damaged

2.0 Life cycle



3.0 Management

3.1 Biological

- The Coffee Berry Borer is attacked by naturally occurring parasitic wasps at all stages of life cycle e.g. egg, larva and adult

3.2 Cultural

Infestations or populations of berry borers are carried over from one coffee crop to the next by breeding in over-ripe berries and Buni left on the trees or fallen to the ground. This is a very important starting point in the management of the borer.

Therefore;

- Practice field hygiene which involves collecting fallen berries to avoid the berries becoming breeding sites for CBB
- Strip all the remaining berries at the end of the harvest season. If infested, bury or burn them
- Undertake proper and timely pruning accompanied by handling and de-suckering
- Avoid over-shading. 30% shading level is sufficient
- Pick coffee cherries regularly to prevent them from becoming over-ripe, dry and eventually falling on the ground.

3.3 Chemical

If infestation was severe in the previous season, spray twice at 3 weeks interval (15th and 18th week from the main flowering) with either:

- 15 ml Dursban 48% EC in 20 lit of water
- 20 ml Nurelle D 38.5% EC in 20 lit of water.
- 5 ml Marshal 25%EC in 20lit of water
- 25ml Penncap 240ME in 20l of water
- Cyclone 515EC 20ml in 20lit of water

4.0 Highlights on Good Agricultural / Hygienic Practices

- Coffee Berry Borer (CBB) infested beans have the potential to pre-dispose the coffee bean to fungal infection and hence mycotoxins (food poison) such as OTA.
- Insect damaged beans are of low quality.
- Indiscriminate use of chemicals should be avoided to prevent pesticide residue accumulation.