5.0 Good Agricultural Practices and Health Safety

- Control insect pest infestations could to avoid loss of quality and overbearing dieback.
- Use only recommended dosage and amounts of pesticides to prevent residue accumulation.
- Use Personal Protective Equipment when applying agro-chemicals.



Compiled by:

H. M. Mugo, J. M. Minai and J. M. Luusa,

For Further Information, 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

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Identification and management STAR SCALE INSECT PEST

(Asterolecanium coffeae)

in Coffeee

1.0 Symptoms

- Green branches bent at nodes with pits in green bark beneath the bend.
- · Drooping dead leaves on affected nodes.
- Numerous small red or yellow substances are found in the bark crevices especially near the ground.

2.0 Alternate hosts

Apart from coffee trees, the star scale has also been observed Jacaranda and Loquat trees.

3.0 Life Cycle

• Laid and retained in a carapace within the female body • 50 at a time

 Usually during the rainy season

3

Mature Females

- Lemon yellow
- Covered with a hard but transparent carapace

Crawlers

- Barely visible to the eye
- Flat and oval
- Yellow in colour
- Move about on the bark



Immature Females

- Similar to adult except for the size
- Reddish brown
- With course hairy projections at the edge of the body forming a fringe

NOTE:

- The cycle from the eggs to maturity takes
 6 months
- Males are small winged insects and are very rare.
- Fertilization of the eggs is infrequent.

4.0 Management

4.1 Biological

- Ladybird beetles and their larvae are often found wandering about the bark eating crawlers.
- Parasitised scales turn into a dark-brown or black colour and are easily distinguished from the reddish-brown healthy adults.
- The adult parasites emerge from the scales through a neat circular hole on the carapace.

4.2 Cultural

- Prune infested trees severely and strip off the crop. Cut off severely infested heads.
- · Burn the infested pruned branches.
- Apply optimum recommended rate of nitrogen fertiliser and mulch to infested trees.
- Where road dust promotes infestation, plant live dust barrier such as kei apple.

4.3 Chemical

Paint as much as possible of the infested brown bark with:

- 1000 ml of Tar oil 5% (Mortegg 50 MO or Ovicide 50 EC) in 20 lit of water or
- 700 ml of Marshall 25% EC in 20 lit water.
- Apply the mixture to soak / drench into the crevices.
- Do not apply the mixtures to leaves or green bark because they may be scorched.
- Take care not to splash the mixture into the eyes.
- Choose a hot dry day during the rains or soon after to apply the mixture.



Star scales on main stem