6.0 Highlights on Good Agricultural/ Hygienic Practices

- Zebra beans produce poor quality liquer
- Zebra beans are possible avenues for fungal infection.
- Strictly observes guidelines on safe use of agrochemicals.
- Indiscriminate use of insecticides should be avoided to prevent pesticides residue accumulation.



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Identification and Management of ANTESTIA BUG (Antestiopsis Spp) in Coffee



INTRODUCTION

A pest of coffee found in both East and West of Rift valley.

Symptoms

- Blackened flower buds. No flower/fruit set.
- Attacked branches grow side shoots (fan branching)



Fan branching

· Bean bear zebra like stripes



Healthy beans



Zebra beans

Alternate hosts

 Can live on shrubs belonging to the same family as coffee (Rubiaciae family)

4.0 Life Cycle

Nymph 10days Round shaped Eggs No functional wings · Laid on underside · Dark brown/orange of leaf in groups of white colour. 5 nympal stages **Immediately** Adult Shield shaped 3 - 4 months Dark brown/orange white colour · Lifespan 3 - 4 months

Management

Biological

- There are naturally occurring parasitic wasps which attack Antestia eggs.
- Attacked eggs are black while normal eggs are white.

Cultural

Avoid delayed pruning and desuckering

Chemical

 Chemical control is recommended when the Economic Injury Level (EIL) has reached 2 bugs in East of the Rift and 1 bug in the West of the Rift.

Spray with either;

- 15 ml Fenitrothion 50 % ML in 20 lt of water
- 15 ml Fenthion 50 % ML in 20 lt of water
- 15 ml Dursban 48 % EC in 20 lt of water
- 20 ml Nurelle D 38.5 % in 20 lt of water
- 5 ml Sumicombi 6 % in 20 lt of water
- 17g Trichlorphon 80%WP
- 15 ml Tata Alpha 10EC in 20 lit of water
- 10ml Thunder 145OD in 20ml of water
- 30 ml Birlane 24% EC in 20 lt of water
- 14 ml Ranger 48 EC in 20 lt of water
- 14 ml Robust 48 EC in in 20 lt of water
- 15 ml Cyrene 480 EC in 20 lt of water
- 15 ml Pyrethrum 6 % EC in 20 lt of water
- 15 ml Tata alpha 1 % EC in 20 lt of water
- 5 g Methomyl 900 SP in 20 It of water
- 10 ml Sharq 36.25 EC in 20 lt of water
- 6 ml Twiga ace 200 SL in 20 lt of water
- 15 ml Ambush 50 EC in 20 lt of water