




## Integrated Management of Scab Disease on Avocado

### KALRO E-mimea Plant Clinic

#### KALRO/NAVCDP Factsheet No. 081/2024.

		
<p>Healthy avocado fruit Source: Wasilwa L., KALRO</p>	<p>Corky-raised, cracked spots on avocado fruits Source: Odhiambo H., KALRO</p>	<p>Enlarged spots Source: Odhiambo H., KALRO</p>

### Description

Avocado scab is caused by a fungus called *Sphaceloma perseae*. The lesions are black or brown in colour and are scattered on the fruit. Young leaves become distorted and stunted with reddish spots on both sides of the leaves. The spores are spread by rain, wind and farm equipment. This disease causes severe losses and reduces marketable fruit quality.

### Diagnosis/identification

#### Symptoms

- Small dark raised lesions/spots appear on leaf petioles, twigs and fruit
- Corky appearance on the surface of the fruits
- Distorted and stunted leaves
- Cracking of these raised rough areas may allow other pathogens to penetrate and rot the fruit.

## Management Strategy

The following management options are recommended:

### Cultural practices

1. Plant using clean seedlings that are free of the pest.
2. Scout 2-3 times a week for initial symptoms and timely control.
3. Practice field sanitation by removing fallen infested fruits, leaves, and twigs to reduce infestation.
4. Regularly prune the trees to remove infested twigs and improve air circulation.
5. Remove weeds which are alternative hosts from the orchard.
6. Apply organic mulch to discourages survival of larvae .
7. Establish wind breakers around the farm to prevent thrips being blown into the orchard.
8. Conserve natural enemies such as green lacewings, pirate bugs, mites and parasitic wasp around the orchard by planting *lantana camara* .
9. Avoid planting alternate host crops such as cowpea in avocado orchard.

### Other management

1. Hang yellow sticky traps 15 cm above the foliage for trapping thrips.
2. Use aluminum reflective mulch to keep away the thrips.
3. Spray the underside of the leaves using neem-based products like Neemark, Achook, and Nimbecidine.
4. Apply biological insecticide e.g. Nimbecidine during fruit ripening stage to prevent thrips reproducing on maturing fruits. Repeat the application of the insecticide weekly for three consecutive weeks during the ripening stage.
5. Spray the underside of the leaves with *Beauveria bassiana* products such as Beuvitech before build up of thrip population.

### Chemical management

1. Spray Alpha-cypermethrin-based products such as Alfatox 100 EC or Tata Alpha 10 EC. Repeat after 7 days.
2. Spray Acetamiprid-based products such as Aceta 20 SP or Acetak Top 70 WG. Repeat after 7 days.

**Note:** Agro-chemicals should be used in consultation with professional practitioners and considering existing cautionary/safety measures, particularly the manufacturer's instructions.

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**Disclaimer:** The content of this publication is for general information to groundnut farmers and technical staff only and no person should act, or fail to act on the basis of the information herein without professional advice from crop health experts affiliated to Kenya Agricultural and Livestock Research Organization (KALRO). This factsheet was produced by KALRO as part of commercialization of avocado with support of National Agriculture Value Chain Development Project (NAVCDP)

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