

## **SAAGA Board Meeting, 13 August**

- Progress towards ensure that that SAAGA funded research to meet the following objective was discussed:
  - Finding solutions to production issues on farms and in nurseries
  - Optimising post-harvest handling & storage to maintain fruit quality
  - Overcoming phytosanitary barriers to market access
  - Building and retaining research capacity
  - Developing new researchers and technical people for the industry
- A post-harvest committee has been established to find alternatives to current post harvest fungicidal treatments. This includes new orchard spray programmes to reduce disease pressure.

## **Avocado Management in Brief: September - October**

September and October are a period of considerable change in the avocado orchard. In many northern production areas, harvesting is drawing to a close, apart from late cultivars and later production areas, while growers in coastal regions such as KwaZulu-Natal and the Western Cape are entering or continuing their harvest season.

At the same time, flowering and early fruit set are underway in many orchards. These are sensitive stages in the production cycle, and unnecessary tree stress should be avoided. Pay particular attention to soil moisture, root activity, tree nutrition and early pest and disease pressure as the new crop develops.

### **Nutrition**

- **Phosphorus (P):** Where leaf P is below approximately 0.15% and/or soil P is below the recommended level for the soil and analytical method used, consider an application of superphosphate at approximately 50 g/m<sup>2</sup> of tree drip area, or MAP at approximately 15 g/m<sup>2</sup>. MAP should only be used where additional nitrogen is required. Where possible, time phosphorus applications to coincide with the active root flush during October.
- **Calcium (Ca):** Calcium nitrate can be applied at approximately 200 kg/ha, or a suitable calcium-magnesium nitrate source at approximately 300 kg/ha where magnesium is also required. Dolomitic lime may be considered where soil analyses indicate a need to correct magnesium and/or soil acidity. During fruit set, split calcium applications over approximately three months, preferably into at least 2–3 **applications**, rather than applying the full amount at once.



- **Zinc (Zn):** Where leaf analysis indicates Zn levels below approximately 30 ppm, zinc sulphate monohydrate (35% Zn) can be applied at approximately 6 g/m<sup>2</sup>. September–October, around early fruit development, is an appropriate period for correcting an identified Zn deficiency.
- **Potassium (K):** Where leaf K is below approximately 0.8% and/or soil K is low, potassium sulphate can be applied at approximately 10 g/m<sup>2</sup> of tree drip area during flowering and early fruit set. Potassium nitrate may be used at a similar rate where both potassium and nitrogen are required. Avoid unnecessary nitrogen applications where tree N status is already adequate.
- **Heavy-bearing trees:** Trees carrying or recovering from a heavy crop may require additional nutritional support during the October root flush. Where justified by crop load, soil and leaf analyses, a suitable 3:1:5-type fertiliser can be applied at approximately 200–500 g/tree, adjusted according to tree size and orchard conditions. Avoid routine application where analyses do not indicate a need.

## **Nutrition: Foliar sprays**

- Foliar nutrition should be regarded as a supplement to, rather than a replacement for, an effective soil and root-zone nutrition programme.
- For young trees, closely monitor root development, leaf condition and nutrient status. Foliar nutrient and boron products such as those traditionally used in young-tree programmes may be applied where required, but application rates and frequency should be based on the product label, tree requirements and soil or leaf analyses.
- Crop-protection products used for Phytophthora management should not automatically be included as part of a routine nutritional spray programme (if the trees do not require treatment). Use only products currently registered for avocado and apply them according to label directions, withholding periods and applicable MRL requirements.

## **Pests and diseases**

- **Scouting:** Maintain weekly orchard scouting throughout the season. Good record keeping, consistent scouting routes and correct trap placement make it easier to identify increasing pest pressure before economic damage occurs.
- **False Codling Moth (FCM):** Begin monitoring fruit for eggs and early damage from fruit set onwards. Maintain Delta traps with the appropriate lure and inspect them regularly. Where intervention is required, use only currently registered control measures and take export-market requirements into account.
- **Sucking bugs / stinkbugs:** Scout weekly, preferably during the cooler early-morning period when insects are easier to detect. Base control decisions on pest pressure and the level of fruit damage rather than applying preventative sprays unnecessarily.



- **Thrips:** Scout developing fruit weekly, particularly shortly after fruit set. As a practical guideline, control should be considered where the established threshold of approximately 4 thrips per fruit is exceeded.
- **Cercospora spot:** Disease risk increases when temperatures exceed approximately 18°C and cumulative rainfall exceeds 20 mm over a two-week period. Timing and coverage of the first protective fungicide application are critical. Where copper is being used, the first application should be made before fruit exceeds approximately 2.5 cm in diameter and/or before the Cercospora Z-value exceeds 15. If an alternative fungicide is considered, first confirm that it is currently registered on avocado and acceptable to the intended export market.
- **Avocado sunblotch viroid (ASBVd):** Remove confirmed infected trees promptly. Remember that infected trees may sometimes remain asymptomatic. Prevent mechanical spread by thoroughly disinfecting pruning, harvesting, injection and other cutting equipment between trees. Where infection is suspected in neighbouring or symptomless trees, appropriate testing or indexing should be considered rather than relying on visual symptoms alone.
- **Phytophthora root rot:** Continue monitoring feeder-root condition and tree health as root activity increases. Where phosphonate or another registered Phytophthora treatment is required, pay particular attention to application timing, product label instructions, withholding periods and MRLs, especially in orchards that still carry fruit. Trees with severe root loss have a reduced capacity to use water; irrigation output or frequency may therefore need to be reduced around badly affected trees to avoid prolonged waterlogging and further root decline.
- **Important:** Always consult the latest SAAGA Registered Chemicals, MRLs & PHIs information and confirm crop-protection choices with your exporter or packhouse before application. Registration for use in South Africa does not automatically mean that a product or active ingredient is acceptable in every export market. Always comply with the current product label, withholding period and market-specific requirements.

## Irrigation Management

Flowering, fruit set, spring vegetative growth and increasing temperatures can result in rapidly changing orchard water demand. Monitor soil moisture frequently and avoid both moisture stress and prolonged saturation of the root zone.

Use soil-moisture instrumentation together with practical field observations. In addition to tensiometer readings, carry out a soil squeeze test at representative sites to assess actual moisture conditions around the active root zone.





| Tensiometer      | September      | October        |
|------------------|----------------|----------------|
| Shallow readings | -10 to -20 kPa | -10 to -30 kPa |
| Deep readings    | -20 to -30 kPa | -20 to -40 kPa |

These ranges should be treated as practical guidelines rather than fixed irrigation triggers. Adjust irrigation according to soil type, rooting depth, tree size, crop load, root health, weather conditions and the orchard’s phenological stage. Flowering and early fruit set remain particularly sensitive to prolonged moisture stress.

**Friendly Reminders**

- Keep spray, fertiliser, irrigation and soil- and leaf-analysis records up to date.
- Base nutrient applications on orchard analyses and tree condition rather than calendar applications alone.
- Maintain weekly pest and disease scouting as the new crop develops.
- Confirm the registration, PHI, MRL and export-market acceptability of every crop-protection product before use.
- More technical information and updated recommendations are available through the SAAGA website/member section.

Remember to look at the SAAGA [PODCASTS](#), where growers can access useful discussions and updates on relevant avocado industry topics.

**N.B.** Please refer to the SAAGA website for the latest registered chemicals and their [MRLs](#). Always liaise with your exporter or packhouse regarding products acceptable in your specific export market. Not all products registered for use in South Africa are accepted in export markets, and additional retailer restrictions may apply.





## **SAMGA Board Meeting, 22 July 2026**

- Preliminary trials have been conducted to find an alternative to Bion (acibenzolar-s-methyl), which has been discontinued, for bacterial black spot control. Further work is being planned.
- Research will be carried out in the coming season to develop local mango maturity standards which can effectively be enforced by Prokon. Options such as fruit dry matter will be tested.
- Research projects on cultivar evaluation, blossom malformation, and bacterial blackspot have been approved.
- Plans are afoot to expose agriculture students from University of Pretoria to the mango industry through a tour to the mango production regions.
- This year's SAMGA Marketing Day will take place at Malalane Country Club on 22 October.
- The use of fludioxonil in the EU has been extended till 30 September 2027, and may not be available for use as a post-harvest application in the coming mango season. Thiabendazole has been registered as an alternative.

## **Mango Management in Brief: September – October**

### **Anthracnose and Soft brown rot**

- Copper oxychloride products @ 250 – 300 g/100L water together with a wetting agent.
- Apply first spray 2 weeks after fruit set and repeat every 3 weeks.
- Alternatively: Azoxystrobin spray on marble size fruit with a concentration of 40ml / 100L water. Medium cover spray: 800-1000 L water/ha.

### **Bacterial blackspot**

- E.g., Copper Sulphate / mancozeb @ 200g / 100L water. Spray preventative:
- Apply a minimum of 2 sprays at 60-day intervals, starting in early September.
- Spray until point of run-off and ensure that the inside growth is also thoroughly covered.
- Citrole 100 can be added for better wetting and spreading at a rate of 250ml / 100L water. Product contains Mancozeb so SAMGA recommends 60 day withholding period.
- Copper oxychloride products @ 250 – 300 g/100L water together with a wetting agent. Apply first spray 2 weeks after fruit set and repeat every 3 weeks.

### **Fruit fly**

- Monitor the fruit fly population and spray accordingly. Make use of products like GF 120 NF.
- For indigenous fruit flies (medfly, natal fruit fly and marula fruit fly) hang 300 M3a traps per ha, 4 weeks before fruit become susceptible to fruit fly.
- For the oriental fruit fly hang 6-12 MAT3 traps / ha. Replace every 6 weeks according to the label.

### **Thrips**

- Monitor citrus thrips on fruit from set to golf ball size. Make use of Fipronil @ 7.5 – 10ml / 100L water.



## Mango scale

- Monitor 10 trees/ha for scale crawlers.

## Mango seed weevil

- Actara to be applied around the base of the trunks with micro irrigation and under the drippers with drip irrigation systems. Not to be used on fruit or processed mangoes destined for export. Not to be used on fruit intended for achar.
- If Actara was not administered in July/August, spray after first egg laying and repeat after new egg laying e.g. deltamethrin @ 40ml / 100L water. High volume application. Apply when fruitlets are 1 cm in diameter (approximately September) and repeat when fruitlets are 3-4cm in diameter (4-5 weeks after first spray). Applications of deltamethrin may lead to an increase in scale numbers.

## Pruning and sanitation

- Cut windows and flower malformation control – refer to the fact sheet available on the SAMGA website
- Prune windows and remove inside growth to improve spray penetration.
- Cut out panicles that did not set any fruit.
- Break out all malformed flowers on trees preferably by 2 flushes back into the harder wood.

## Irrigation

Irrigation is important especially early in October in dry years. The average litres of water needed per day per mature tree:

## Fertilization

- Soil and leaf samples (Oct)
- Take leaf samples annually and soil samples biennial for fertilizer recommendations. Take 7-month-old mature, hardened-off leaves, but not after a significant rainstorm of more than 50mm, wait at least 2 weeks then.
- Take the soil samples from the same trees as the leaf samples and use the same trees every year.

## General

- Please remember to apply for removal permits for *Bactrocera dorsalis*. Details will be communicated from SAMGA to Growers.
- Registration for exporting to the EU are also due in this time, there will be communication from SAMGA with specific dates once available from the Department of Agriculture.

*N.B. Please refer to the SAMGA website for the latest registered chemicals and their MRLs and liaison with exporter/ packhouse on products acceptable in your designated export market despite being registered and accepted in the South African market. Please check with your exporters whether you can use chemicals that are flagged as yellow or red under Export Market Retailer status.*



## Litchi Management in Brief: September - October

### September

#### Fertilisation

- Foliar sprays: Zn, Cu, B on the 1st male flower opening, and cytokinins (optional) and KNO3 (2%) on female flower opening (dependent on leaf analyses results).
- Soil application: Early fruit set: 20% of annual nitrogen & potassium.
- Sampling: Take leaf and soil samples in either September or October.

#### Pests

- Nematodes: Sampling and control (a systemic chemical can be used early in the season; a contact chemical can be used at any time).

#### Irrigation

- General: Ensure optimum irrigation for good fruit set.

| Tensiometer | September             | October               |
|-------------|-----------------------|-----------------------|
| 0-30 cm     | Micro: -10 to -30 kPa | Micro: -10 to -30 kPa |
|             | Drip: -4 to -15 kPa   | Drip: -4 to -15 kPa   |
| 30-60 cm    | Micro: -15 to -30 kPa | Micro: -15 to -30 kPa |
|             | Drip: -10 to -20 kPa  | Drip: -10 to -20 kPa  |

- Canopy coverage: Water requirement guideline in the table below is based on a planting density of 9 x 6 m (185 trees/ha). Adjust for different areas with scheduling tools e.g., tensiometers, evaporation pan and crop factors.

| Orchard maturity | September | October |
|------------------|-----------|---------|
| At Planting      | 15        | 19      |
| 25%              | 38        | 47      |
| 50%              | 76        | 95      |
| 75%              | 114       | 142     |
| 100%             | 151       | 189     |



## Weed control

- Apply herbicides to manage weeds in orchards in both September and October.

## Harvest

- Ensure fruit meet required maturity standards and export regulations.
- Cover fruit with bags (optional).

## Propagation

- Make air layers or graft on rootstocks.

## Land preparation

- Prepare soil for new orchards in both September and October.

# October

## Fertilisation

- Foliar sprays: 1-2 applications  $\text{CaNO}_3$  (2%) or similar within 6 weeks after female flower Auxin at 3 - 4 g stage for fruit size (optional) OR 1-2 % MKP at 8 - 10 g stage for fruit colour (optional)
- Soil applications: Check soil pH.

## Pests

- Fruit fly: Monitor fruit fly numbers with traps. Control with poison bait.
- Litchi / False Codling Moth: Monitor and control both pests.

