



# SABIO

South African Bee Industry Organisation

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## Interim Guideline for Beekeepers

### Managing Bees in an AFB Positive Environment

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[ Attachments to follow: Pollination Standard, Procedures for Sterilization, Burning & Shook swarm method ]

#### 1. BACKGROUND

The delimiting survey commissioned by DAFF and jointly run with the ARC and SABIO to determine the spread of AFB, indicates that the disease is present in much of the Western Cape, to such an extent that neither the eradication of the disease or its containment within a section of the Western Cape are considered feasible. It is not yet known whether AFB is present outside the Western Cape, and efforts to prevent its spread to other parts of the country are ongoing. New regulations for the Bee Industry in this regard will only be promulgated after more information has become available from the ongoing survey.

Until then we would like our beekeepers to voluntarily act responsibly so that the disease is not unnecessarily spread further and quicker as we do not know how our bees will react to it and what the effect on the agricultural industry in general will be.

The following **guidelines** were drafted in consultation with knowledgeable beekeepers and researchers and will stand until more clarity is obtained. We urge our beekeepers to follow them henceforth and to contact the numbers below during this period to report escalating symptoms.

In this document "**infected**" means clinically or visually infected and does not refer to the mere presence of AFB spores.

#### 2. GENERAL GUIDELINES ( = GOOD BEEKEEPING PRACTICE )

- a. Inspect all hives more often --- at least once per month if possible.
- b. Inspection in this regard always means looking at all the brood frames in each colony.
- c. Pay particular attention to weak or diseased colonies and abnormal behaviour.
- d. Ensure you know the symptoms of AFB and other diseases like EFB, Chalkbrood, Varroa and Sacbrood.
- e. Do not move or manipulate any hive prior to properly inspecting it.
- f. Report clinical symptoms of AFB, or the suspicion thereof, to the persons / numbers indicated below.
- g. Do not allow diseased colonies to die off uncontrolled.
- h. Keep robbing and drift in apiaries to a minimum.

- i. Work bees and store equipment as hygienically as possible.
- j. Keep all stress factors on the bees as low as possible.
- k. Keep infected colonies, hive components and equipment away from healthy colonies.
- m. Bees should not be allowed to feed from honey-wet components or containers.
- n. Note that no chemical product is currently registered in SA for treating AFB.

### **3. POLLINATION**

- a. All hives should be thoroughly checked for AFB before being used for commercial pollination.
- b. Do not use any hive with clinical symptoms of AFB for pollination.
- c. Hive performance in orchards must be checked regularly and suspicious behaviour investigated.
- d. Transit camps should be designed and utilised such that drifting is minimized.
- e. Hives should be closed and moved only when all the bees are inside.
- f. The further individual hives can be placed from each other, the better.
- g. Pollination units must strictly be according to the prescribed minimum standards.
- h. All colonies should be inspected after the end of pollination usage.

### **4. HARVESTING & MARKETING OF HIVE PRODUCTS**

- a. It is recommended that commercial products (pollen, honey & wax) are not harvested from hives heavily infected with AFB, and that it should be burned or irradiated.
- b. Only bottled honey should be shipped to outside the Capensis area.
- c. Unbottled honey to be shipped outside the Capensis area should either be irradiated or tested & certified to be free of AFB.
- d. Wax should be shipped out of the Capensis area only in the form of solid clean blocks.

### **5. WORKING THE HIVES**

- a. Always firstly inspect the brood for signs of AFB.
- b. Use new or properly sterilised old hive parts and combs if possible.
- c. Work as hygienically as possible (stacking & storing, vehicle & fasteners, etc).
- d. Sterilize tools, gloves and hands between apiaries and when an infected hive was handled.
- e. Replace old and pollen-bound combs regularly with new foundation --- 3 per annum if possible.
- f. Mark infected hives clearly for future identification. Also try to mark un-infected hives from the same apiary for easier follow-up inspections in future.
- g. Keep record of the numbers, findings and actions per apiary.

## 6. HANDLING OF INFECTED HIVES

### **a. Heavy Infection**

- i. Identification: Lots of infected cells, the colony has lost control and will probably die.
- ii. Destroy the AFB spores as follows in accordance with proper procedures :
  - Burn all the combs (honey & brood chamber) and all the bees and
  - Burn or sterilize the other hive components.

### **b. Light Infection**

- i. Identification: Few infected cells, the colony might survive with proper management.
- ii. Treat the hive as follows :
  - If possible, move all these hives to a proper dedicated site to facilitate better management.
  - Apply full shook swarm management in accordance with the defined procedure.
  - Inspect the colony regularly and if clinical symptoms recur within 12 months of treatment, it should be handled as for heavily infected AFB colonies above.
  - If light clinical symptoms re-appear after more than 12 months after treatment, the procedure can be repeated.

## 7. CONTACT PERSONS

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