Adopted Code of Practice

Minimising Risk of Spreading American Foulbrood.

Introduction

American Foulbrood (AFB) is a spore forming bacterium that affects the larval stage of the honeybee. The spores can spread AFB. The spores get into everything that they come into contact with: frames and hives; bees; clothing and equipment; as well as bee products; including honey. AFB is a reportable disease in UK and the control measure is to destroy both the colony and hive by burning.

There is limited scientific information on AFB spread by honey. There are 2 papers (Goodwin, R M; Perry, J H: Ten Houten, A (1994) The effect of drifting honey bees on the spread of American foulbrood infections. *Journal of Apiculture Research* 33(4): 209 – 212; Sturtevant, A P (1932) Relation of commercial honey to the spread of American foulbrood. *Journal of Agricultural Research* 45(5): 257-285) that conclude that the lowest concentration of spores that have been fed to colonies and reported to give rise to infection is 50 million spores/litre, fed as 5 million spores in 100ml.

In one study of honey from a range of countries, (Hansen, H (1984) the incidence of the foulbrood bacterium *Bacillus larvae* in honeys retailed in Denmark. *Danish Journal of Plant and Soil Sciences* 88:329-336) 56% of 131 samples tested positive for *P. larvae, larvae* spores, and 37% had concentrations higher than 170 million spores/litre. This is a snapshot from 25 years ago. However, we can conclude that some of the honey held by honey packers has the potential to spread AFB.

In a recent study (submitted for publication) of AFB outbreaks in UK from 1994 to 2009, FERA has demonstrated a statistically significant link between the location of two large honey packers and persistent clusters of AFB.

Therefore Honey packers must take control measures to minimise this risk.

The members of the Honey Association are committed to taking all practical, effective and proportionate measures to minimise the risk that their operations can cause to their local honeybee population.

Risk Assessment

Honey Association members undertake to carry out a risk assessment of their own operations, and to ensure the appropriate control measures are in place.

Typically there are two risk areas:-

- Receipt and storage of honey.
- Disposal of waste that has been in contact with honey, for example honey drums and waste packaging.

Examples of control measures are shown below.

Control Measures

Honey reception and storage.

- On receipt, all honey drums (or other containers) will be inspected, and if leaking or damaged so as to expose honey, will be sealed with an appropriate lid or film.
- If a honey spill has occurred on a delivery vehicle, we will advise the driver that the spill must be cleaned up, and we will provide assistance to ensure that it is cleaned up appropriately.
- Handling equipment and procedures should be designed to minimise risk of honey spills and leakage.
- Any spills or leaks that do occur will be cleaned immediately.
- Honey storage area will be kept orderly and inspected regularly for any leaks or spills or for any insect activity that indicate access to honey. Any leaks or spills will be resolved as a matter of urgency.

Waste disposal

- All streams of waste that have been in contact with honey will be risk assessed, and all practical, effective and proportionate steps will be taken to minimise foraging opportunities for honeybees.
- Control measures that might be used include:
    - Covering waste skips with a close fitting lid or fine netting.
    - Inspecting and approving the downstream handling of waste.
    - Washing waste before it leaves site. It is recognised that this may not be practical (for example, because of effluent considerations), effective (it is hard to wash out squeezy bottles) or proportionate (cost may be prohibitive).

Review

- Members will review their control measures annually, and will have due regard to any cases of AFB that have occurred in their area.
- Members will invite NBU/FERA (or relevant responsible authority) to visit their sites regularly and will respond to suggestions that they might make.
- Members will liaise with BBKA and local beekeepers associations and will speedily respond to issues or complaints made.