



Australian Government
Biosecurity Australia

30 March 2006

BIOSECURITY AUSTRALIA POLICY MEMORANDUM 2006/08

PROGRESS REPORT ON THE IMPORT RISK ANALYSIS OF HONEYBEE SEMEN

This Biosecurity Australia Policy Memorandum (BAPM) provides stakeholders with a progress report on the import risk analysis (IRA) of honeybee semen into Australia. It includes the outcomes of the hazard analysis and the next stages of the risk assessment process.

The IRA of honeybee semen commenced in June 2002. The IRA is in response to strong interest from the Australian honeybee industry in importing honeybee genetic material to expand the current gene pool and develop disease resistance characteristics. A Technical Issues Paper, released in October 2002 (Animal Biosecurity Policy Memorandum 2002/40), identified a number of hazards requiring further assessment, as part of the draft IRA report (the next consultation step in the IRA process). They included American and European foulbroods, acute paralysis virus, deformed wing virus, filamentous virus, *Apis mellifera capensis* and *A. m. scutellata*.

Biosecurity Australia has updated the hazard analysis. It identified the following as key issues for further consideration.

- 1 American foulbrood is a nationally notifiable disease – Australia has official control programs.
- 2 European foulbrood is absent from Western Australia and the Northern Territory.
- 3 Deformed wing virus – the presence of the virus in Australia has not been demonstrated. The virus has been shown to be transmitted with and without the presence of *Varroa* mites. The virus's ability to survive in semen is unknown.
- 4 Africanised honey bee (AHB) genetics – there are difficulties with establishing the genetic characteristics of semen:
 - a) Expert opinion indicates that the detection of AHB genetics using current DNA techniques is unreliable.
 - b) Mitochondrial DNA is not present in semen, making it difficult to determine its origins.
 - c) A DNA analytical method that definitively distinguishes between European and Africanised honeybee genetics is not yet available.
- 5 Other hazards for further assessment – Cape honeybees, and *Apis* species other than *Apis mellifera* (*A. cerana*, *A. dorsata*, *A. florea*).

The updated hazard analysis also identified some issues that no longer require further assessment based on current scientific information:

- 1 Acute paralysis virus – Acute paralysis virus is only associated with *Varroa* mite infestation. It results in inapparent infections, and is unlikely to cause adverse consequences. Transmission of the virus occurs through salivary gland secretions. There are no control measures in Australia for this disease.

- 2 Filamentous virus – The scientific literature indicates that Filamentous virus is mostly harmless and thus unlikely to cause adverse consequences. The virus is most likely to be associated with *Nosema apis*, and reports indicate that transmission occurs by feeding newly emerged bees and possibly by cannibalism. The virus is found in the haemolymph of adult bees. It is likely to be present in Australia (except Tasmania) and there are no control measures in Australia for this disease.

Consultation

Biosecurity Australia will continue with the risk assessment (including completion of the literature review) and the release, exposure, and consequence assessments — as per the requirements of Chapter 1.3.2 of the *International Animal Health Code (Terrestrial Animals)* of the Office International des Epizooties (which is the World Organization for Animal Health) before developing a risk estimate for each hazard.

Biosecurity Australia will take into account any previous comments received regarding these hazards during the risk estimation process.

Please pass this notice to other interested parties. If those parties wish to be included in future communications on this matter they should get in touch with the contact officer (details below).

Information on IRAs and policy reviews being conducted by Biosecurity Australia is available from our website www.biosecurityaustralia.gov.au.

Confidentiality

Respondents are advised that, subject to the *Freedom of Information Act 1982* and the *Privacy Act 1988*, all submissions received in response to BAPMs will be publicly available. Comments may be listed or referred to in any papers or reports prepared on the subject matter of the Memoranda.

The Commonwealth reserves the right to reveal the identity of a respondent unless a request for anonymity accompanies the submission. Where a request for anonymity does not accompany the submission the respondent will be taken to have consented to the disclosure of his or her identity for the purposes of Information Privacy Principle 11 of the *Privacy Act*.

The contents of the submission will not be treated as confidential unless they are marked 'confidential' and they are capable of being classified as such in accordance with the *Freedom of Information Act*.

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