

AHB TMG Minutes

Meeting Fifteen of the Asian Honey Bee Transition Management Group (AHB TMG)

Teleconference held on Thursday 26th September, 2013

Attendees: Tom Aldred (Chair) Department Of Agriculture, Penny Linnett Department Of Agriculture, Sarah Corcoran DAFF Queensland, Trevor Weatherhead AHBIC, Ian Zadow AHBIC, Dave Guez University of Newcastle, Rod Turner PHA, Brad Siebert PHA

Apologies: Sam Malfroy (Secretariat)

Item 1 – Welcome

The Chair welcomed the Members of the Asian Honey Bee Transition Management Group (AHB TMG) to meeting fifteen. The minutes of the last meeting were accepted by the group.

Item 2 – Industry project update

David Guez provided an update on the attractants project 'Develop an attractant specific to *A. cerana* Java strain' due to be completed by December 2014 (Summary report in appendix 1). Rod Turner noted that although linked to the T2M program this was a RIRDC/Industry funded project.

David stated that Gary Kong had contacted him to discuss another project on bee detection (sound detectors for *A. cerana* buzzing) and mounting traps on ships to see how these different projects could be aligned. Gary would now like David to build a prototype and test this technology in the field. Rod Turner noted that NAQS should be involved as they could use these traps/detectors on in-coming boats.

David noted that the detectors work fine but the issue is still attracting bees to the units without the use of honey.

Ben Oldroyd had provided a previous update on the inter-specific mating project 'Inter-specific matings between *A. cerana* and *A. mellifera*' due to be completed by May 2014 (Summary report in appendix 2).

Item 4 – DAFF QLD update

Sarah Corcoran provided an update on the internal changes within the department which now sees the Plant Bio Product Integrity Division overseeing all bee related work. This transition will occur over 12 months. DAFF QLD officer Robert Stevens based in Townsville has passed on that there is still activity regarding AHB notifications.

An update was provided on the AHB detections over the last 3 months:

- July – 27 public enquiries, 4 Restricted Area Permits issued, 1 response from ADAFF staff.
- Aug – 36 public enquiries, 1 Restricted Area Permit issued, 2 responses from ADAFF staff.
- Sep – 21 public enquires, 1 response from ADAFF staff.

Of all these detections one was in Mossman and one was in Cooya beach (both north of Port Douglas and outside of the current RA). The Restricted Area Permits that are issued are for hive movements and any other bee related items.

Item 5 – CFIA and trade issues

Penny Linnett provided an update on the Canadian Food Inspection Agency (CFIA) risk assessment of queen bees and packaged bees from Australia. This review is due to be completed before Christmas well before next seasons trade which starts in January 2014. Penny confirmed that the Department of Agriculture (DOA) had been providing ongoing

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assistance to CFIA to complete this risk assessment including bee maps, where we import from under what conditions and that there is likely to be no trade disruptions but hinges of the risk assessment.

Penny Linnett also noted the Media interest regarding the work was underway to finalise requirements to allow imports of Queen Bees from Canada. The first consignment should arrive in a matter of weeks.

Item 3 – RIRDC update

The Chair mentioned the RIRDC project update circulated to the AHB TMG prior to the meeting and requested feedback or questions.

- The report of John Roberts' project 'Establishing the disease status of the Asian honeybee in the Cairns region' has been published <https://rirdc.infoservices.com.au/items/13-082>
- A training workshop for beekeepers, pursuant to the AHB T2M program, was undertaken in August (Trainers were: Trevor Weatherhead, Ben Oldroyd and Denis Anderson.).
- Simon Barry's 'Risk assessment of ports for bee pests and pest bees' is scheduled to be completed next month and will be considered by the Steering Committee of the National Bee Pest Surveillance Program scheduled for 24 October.
- RIRDC proposes to use industry's uncommitted AHB T2M funds (\$2,789 out of \$400,000) within RIRDC's Honeybee RD&E Program.

Item 6 –Final reporting to DOA and funding

The chair noted that DOA would be requesting a summary style final report which details the major milestones of the AHB T2M program.

Rod Turner confirmed that the final report would provide a summary based on the extensive work DAFF QLD had produced throughout the program. It would also detail the successes and challenges and major outcomes from the two year T2M program. Financial acquittal reports and other standard DOA reporting requirements will also be met.

Rod Turner also mentioned that PHA would continue to maintain and update the AHB T2M website.

Trevor Weatherhead noted that AHBIC approved RIRDC to use the uncommitted AHB T2M funds (\$2,789) within RIRDC's Honeybee RD&E Program. The members of the Transition to Management Group who administer these funds also agreed to this funding transfer.

Item 7 – Future meetings of the AHB Working Group

The Chair stated that future meetings of the AHB TMG would help to keep communication channels open between governments and industry. The Chair proposed to keep the next meeting date open but would probably take place before the end of 2013 especially if there is a Canadian update.

Contact details were requested for a number of members so that communication could continue outside of the formal meetings.

DAFF Queensland	Sarah Corcoran	sarah.corcoran@daff.qld.gov.au	07 3087 8105
AHBIC	Trevor Weatherhead	ahbic@honeybee.org.au	07 5467 2265
	Ian Zadow	immjzad@bigpond.com	08 8757 2435
University of Newcastle	Dave Guez	David.Guez@newcastle.edu.au	0466 416 024

The Chair thanked the AHB TMG members and closed the meeting.

Appendix 1

Develop an attractant specific to *A. cerana* Java strain

(Project summary update)

David Guez is providing a written summary of the project and I will forward this through when available.

Appendix 2

Inter-specific matings between *A. cerana* and *A. mellifera*

(Project summary update)

- Ben Oldroyd

We sampled 12 *Apis mellifera* queens mated in Cairns and surrounding regions; five queens in May 2013 and seven in August 2013. We identified that four *A. mellifera* queens had mated with *Apis cerana* drones, using a species-specific PCR test of DNA from sperm contained within the queen spermathecae. Three of the positive queens were sourced from one apiary in Gordonvale. The fourth queen was from Cairns city. DNA sequence of the *A. cerana* PCR product from one of the queens showed 99% identity to the published *A. cerana* sequence. (one base pair difference was present). Though sperm from *A. cerana* was present in these four queens, a second PCR indicated it is approximately less than 1/10th of the total DNA from the spermathecae, suggesting these queens mainly mated with *A. mellifera* males.

We sampled approximately 50 eggs from three of the four queens that tested positive for *A. cerana* sperm. While some eggs were uninformative (too little DNA was present - ranged from 50-80% success per hive), no eggs were confirmed to be fertilised with *A. cerana* sperm. Initial PCRs from one hive had some faint *cerana* bands but these have not been confirmed and were probably false positives.

Tests of 22 *A. cerana* queens in Cairns revealed no *A. mellifera* semen in the spermatheca. Tests of 42 *A. mellifera* queens from China showed that 6 had mated with *A. cerana*.

Conclusion. Matings are occurring between *A. cerana* and *A. mellifera* in the Cairns area and in commercial apiaries in China. The frequency will increase as the density of *A. cerana* increases. Our own work and that from Japan suggests that eggs resulting from these matings are inviable. Therefore the quality of queens is impaired when they mate inter-specifically, the degree of the impact being proportional to the number of interspecific matings.