



An AHBIC Company

B-QUAL Australia Pty Ltd

B-TRACE Australia



September 2022 Newsletter Vol 22 issue 7

B-QUAL Australia Pty Ltd – B-TRACE Australia

Ph. 0404 38 1942

www. BQUAL.com.au

Email: admin@bqual.com.au

www. Btrace.com.au

Email: admin@btrace.com.au

Chairman's Message

Hi and welcome to all our existing and future members.

B-QUAL / B-TRACE has been busy being represented in various state conferences and I would like to thank all board members who have represented B-QUAL / B-TRACE at these events, either in person or via video links.

At one of the conferences I spoke at, I was asked by a beekeeper “what are the advantages for me of being in B-QUAL?” This made me take a step back; so ask yourself these questions:

- Do you want to sell your honey or wax?
- Do you want the best price for your honey?
- Do you want to prove the authenticity?
- Is QA going to be required by packers?

The answer is in 2022, if you produce and sell honey then you need B-QUAL or B-TRACE.

You will be much further ahead than those without it.

I know I am preaching to the converted, but there are still so many out there who don't understand the necessity and value that a QA Food Safety accreditation program provides for its members.

B-QUAL and B-TRACE are an industry owned and run program. It is under our control and as beekeepers it is our responsibility to move forward to meet tomorrow's standards, in biosecurity and product provenance and food handling.

Wayne Fuller.

Chairman B-QUAL Australia Pty.

Part of our Traceability and Chemical database grant condition that we undertook 2020/2022 was to report back to the wider beekeeping industry in Australia on the project completion. The final report was lodged with DAWE June 2022 and fully approved, we now publish the report and will disseminate among various industry organisations.

Honey traceability report – B-QUAL Australia



B-QUAL Australia sets and manages the industry husbandry and product packing standards for the beekeeping industry, including biosecurity and HACCP requirements. Industry standards reviewed regularly and documented in the B-QUAL manual. To remain accredited, beekeepers are independently audited to ensure that they meet these standards.

Prior to this grant the CRC for Honey Bee Products partnered with B-QUAL Australia to digitise the recording of industry business information to establish a system for continuous

improvement, and offer off-site access to the records for auditing purposes. The aim was to reduce costs so that a wider cross-section of the industry would take advantage of the system. It also achieved improved efficiency for product traceability and recall.

To use this traceability system for product authentication, it was realised that a number of other aspects needed to be added to provide traceability as well as authentication. In 2018, the industry was accused of selling adulterated product and traceability and authentication systems were insufficient to immediately address and correct incorrect claims. The inability of the industry to provide an immediate answer created untold reputational damage.

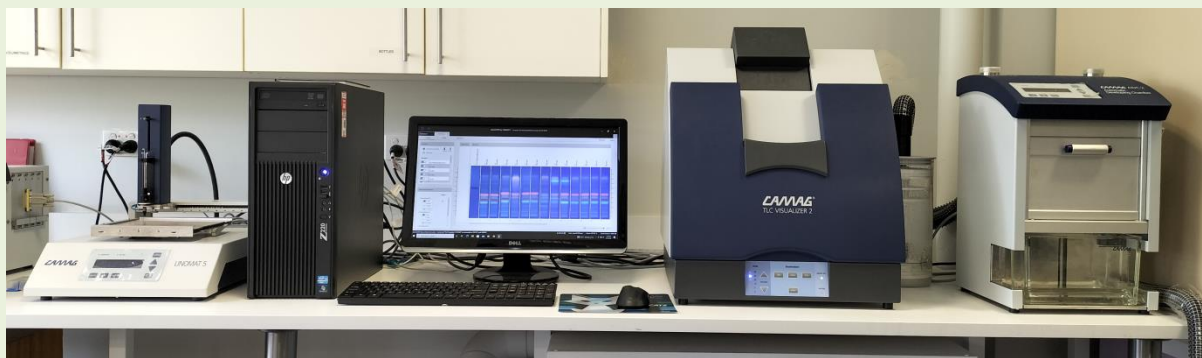
To address honey authentication, a Traceability Grant was applied for by B-QUAL Australia, the CRC for Honey Bee Products and the University of Western Australia. The aim was to take the groundwork of the B-QUAL traceability system and add-on a honey assurance system to regain the trust of the consumer. For authentication, checks on claims made within the traceability system would need to be provided to the customer.

The first step was to add a flora reference system as a database. Prior to this grant, the method to develop such a database was designed through the CRCHBP for Western Australia and this grant expanded the database to include the whole of Australia. The system is linked to sub-biogeographical regions so that apiary site information was kept confidential for the beekeeper. Floral types are linked to these sub-biogeographical regions and hence this provided sufficient location data for authenticity. This provided the link of apiary site to jar for placement of the honey production.

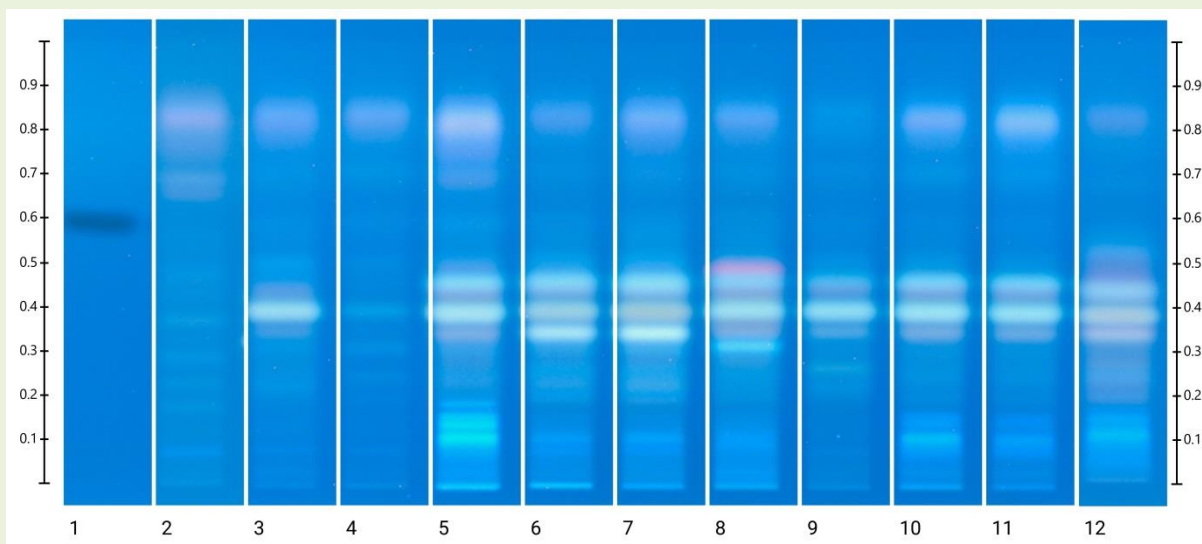
Chemistry and pollen assessment methods were selected to test the honey to link back to the placement of the apiary. As honey bees collect nectar and pollen, databases for both required development.

Honey analysis is presently judged using the seven CODEX tests. To start with, laboratories that the project was to use were asked to do a ring test. For the CODEX tests there is an international service and this was used. Each sample has the set of tests undertaken. Concern was if Australian honeys have been considered during the development of this system.

The CRCHBP discovered that High Performance Thin Layer Chromatography (HPTLC) could detect the nectar signatures of our native flora. As this is a powerful marketing tool for premium honeys, this test was also included. A system to count the pollen in the honey using AI to classify the pollen to genus level is being finalised. Pollen counts will be completed in the next couple of weeks.



The digital dictionary was designed to store all of this analytical data. It connects to B-QUAL so that the traceability data for each honey is connected to the chemistry. To keep in line with the scope of the Traceability Grant, the system was built with the support of the CRC for Honey Bee Products. For those beekeepers who are B-QUAL members this information was gathered through an app. Which was also built by CRC for Honey Bee Products.



Fridges, to store honey samples for testing, were purchased for WA and Victoria, and Tasmania made other arrangements. B-QUAL organised for the long-term storage of the samples with a commercial company when the analyses were complete. This is what we have termed 'the Australian honey library'.

Aims of the Project

- Test sample collection and verification of honey between the melliferous flora in each sub – biogeographical region in Australia, by controlled sample collection and sub-geo-biographical data by B-QUAL and other beekeepers, to strict collection protocols.
- System development for the chain of custody level standards for traceable sample collection. This will assist in aligning sample collection processes industry wide.
- Develop Standard operating procedures (SOP) for honey testing in line with international standards and unique characterisation tests for iconic Australian honeys
- Undertake trial ring tests to check Australian wide understanding and conformance with the SOP outlined.



Project Activities and outputs.

We have worked to complete all the project activities.

- To develop ring tests and develop SOP for honey tests and chemistry recording. Current Status: Finalised.
- Selected participating Australian laboratories that participated and conformed to above standards. Current Status: Finalised.
- Additional nectar signatures identified using HPTLC - included Leatherwood and Red Bell – samples are accumulating for others to be confirmed. Current Status: On-going.
- Commenced honey sample collection in accordance with project standards. Current Status: In progress
- Commenced honey laboratory testing. Current Status: In progress
- Developed the Australian Honey Library database software specifications, allowing for current international standards and possible new analytical methodologies. Due to the restrictions of the grant, the Australian Honey Library database was constructed by CRC Honey Bee Products. Current Status: Finalised
- Commenced test and chemistry recording into the Australian Honey Library database of the completed test samples. Current Status: Ongoing. This stage has been delayed due to supply chain delays by Australian laboratories in obtaining reagents supply from Europe, now resolved and final testing completed. Current Status: Ongoing final results currently being calculated and entered into database.
- Completed biogeographical flora database of the whole of Australia (additional to WA which was complete prior to the start of this project) inclusion into B-QUAL system. Current Status: Finalised.
- Workshops to promote final collation of the Australian Honey Bee Product assurance system, complete Current Status: Finalised
- Workshops for anti-counterfeiting and labelling, 7th and 8th July 2022. Current Status: Finalised.

Project outputs

- Specification document for honey chemistry data storage designed.
- Honey Library storage sites established in Victoria, WA and Tasmania. Will be centralised with B-QUAL on closure of project.
- Anti-counterfeiting workshop on line webinar July 7th and 8th July 2022

- Developed and incorporated a biogeographical flora matching database for honey bee products.
- Batch number report on traceability – this aligns with b above on chain of custody
- B-QUAL training complete and video available for B-QUAL members.
- Prepared and incorporated an Australian Honey library database with ability to add data over coming years. Owned by B-QUAL on behalf of the Australian Honey Industry. This database available to AHBIC (The Australian Honey Bee Industry Council) all State Associations and Researchers.
- Developed ring-test regime for CODEX testing between Australian laboratories.
- Added to the identification signatures of unique Australian honeys.

Change in project scope

We report, other than the approved variation to cancel the MNR (Magnetic Nuclear Resonance) testing to more samples, no other change from the original scope of works has changed. MNR has been shown not to correlate to any of the CODEX testing.

Correspondence emails request change to MNR 30th Nov 2020, request further data by DAWE 8th Dec 2020, approval dated 14th December 2020.

Collaboration

The project has been collaboration between:

- The CRCHBP (Cooperative Research Centre Honey Bee Products)
- The University of Western Australia,
- B-QUAL Australia Pty Ltd.
- Beekeepers across Australia

The project lead has been Professor Sharon Purchase, Head of Business School, Marketing University of Western Australia. B-QUAL project manager was Don Muir.

Next Steps.

Due to delays caused by pandemic with effect on supply chain delays in supplies for testing, travel restrictions to conduct workshops and weather events in obtaining timely samples we are approximately three months behind schedule in preparing a final report on grant findings for industry. We expect full report for industry by mid-September 2022.

The final step in this grant project is to complete collation of all data, into industry readily available data relevant sections, i.e., chemistry, varietal types, Biographical regions and flora banks.

Secure data storage has been arranged for the collated data to ensure ongoing trade security.

Advise industry of grant findings.

Recommendations.

- Recognition a honey traceability system is linked to authenticity
- A system of ring-testing between analytical honey testing laboratories is advisable.
- To sustain the development of the Australian honey library (as honey will change with climate change and other land-use change events) testing within Australia is encouraged. The data and samples accumulated as a reference as this will strengthen our characterisation of Australian honey

- Improve the batch code system by standardising its recording (code not date) and placement on a label/jar (preferably included in the label)
- HPTLC used as a quick and low-cost analytical system for domestic quality control and international marketing. Alignment with international standards will be required for the export market.
- Research undertaken on Australian honey uses samples traced from field to jar for insights into flora contribution to honey quality or samples from the Australian Honey Library together with their previous analytical information.

Contribution to the Traceability Grants Program.

Provided a system for Australian honey authentication. Using tests that align with International requirements and standards, we are providing proof of the alignment of Australian Honey products with the CODEX standards.

Improve authentication of Australian nectar signatures of our honeys through building a database of non-sugar High Performance Thin Layer Chromatography (HPTLC) analysis. The tests not only achieve a high acknowledgment of the honey chemistry and standards matching, but we are also adding the unique chemistry make up to various monofloral honey varieties that up to now have been unknown and untested. In particular this testing works from the nectar signature within monofloral honeys.

Australian honey can now be matched to biogeographical regions to show the nectar signature from such regions which can match the floral database developed for this project.

The program will give Australian exporters verifiable proof of provenance, purity and chemical makeup.

Consumer trust can be improved through the authentication techniques through access to further honey variety information.

With scientific proof of the product, we place the industry in a position to capitalise on price advantage to both domestic and export markets, by product provenance.

All collected data can be incorporated into an overall Australian honey marketing program with case studies and verifiable claims.

Australian honey database library storage can be used to negate future honey adulteration accusations.

Budget

Project Grant \$ 189,000 ex GST. Fully expended as per budget.

B-QUAL Australia and B-TRACE working with CRCHBP and UWA to create a clean green trusted food chain industry.

It is the intention of Directors to improve communication with our members which will be by email; can we suggest that you occasionally check your spam or junk file to ensure any message have not been directed to those files.



B-TRACE has been developed to assist small enterprise beekeepers to be able to show they produce to an audited QA and Food Safety Plan and adhere to accredited industry standards.

The program satisfies the requirements of the National Biosecurity Code of Practice, and through the desk audit process will give verifiable proof to your customers of the provenance of your product and proof it has been produced in accordance with best industry practice.

A web hive management app is available for all record input which you simply upload to our audit division as part of the annual desk audit process.

The program is proving extremely popular and although newly launched membership is growing each month and site visits to the B-TRACE web site is also increasing week on week.

Please advise any of your colleagues who operate small apiaries of up to 100 hives to visit web site www.btrace.com.au and consider joining.

We remind all members that record keeping is a requirement under the National Biosecurity Code of Practice and the B-TRACE and B-QUAL app is designed specifically for you.

On www.bqual.com.au and www.btrace.com.au we have a video hosted by Professor Sharon Purchase demonstrating how to use the app. It gives a very clear and concise understanding of how to use.

Our sponsors have supported B-QUAL over the last 3 years for which we are extremely grateful understanding the difficult trading times incurred during the pandemic.

Please support those who support us.



Company changes.

By now B-QUAL members would be aware that the Directors after a complete review of the Audit and Administration operations of the company made significant changes by appointing new auditors and administration companies.

The changeover was effected during July and August and has been almost without interference to normal operations. Those members who were due to audits were contacted by the new auditors and had extensions allowed until new audits could be conducted. We acknowledge the amount of additional work undertaken by our new audit company Safe Food Australia Pty Ltd, to get all audit lists current.

Audits are now being conducted in all States and I can say that we are receiving excellent feedback as to the conduct and method of the audits. If you have any audit requirements please use the B-QUAL website enquiry tab select "Audits" and email or direct to admin@safefoodaustralia.com.au

We have had some program members saying they have not received correspondence about the changeover; we have worked from the lists of the previous audit company so if you have not received any correspondence please look in your spam or junk file if nothing there ring 0404 38 1942 and we can check your email address.

Any email "bounce" we are getting we are following up with a phone call as well, so within time we should have complete and up to date records.

We draw your attention to the new website www.bqual.com.au which is now up and we will be using this site for a lot more news and company messaging so I encourage you to check in regularly and see what is happening. We have added a comprehensive video library which contains videos of past company events or webinars, including the recent Anti-Counterfeiting and Labelling 2 day workshop.

B-TRACE web site also lists same videos.

To all members a reminder that record keeping is an important part of your business and records must be kept under the NBCoP for all biosecurity related actions and observations. Accurate records must be kept for traceability.

Disclaimer: Material and information published in the B-QUAL newsletter, is produced for general information only. Although published in good faith, the company and/or any officer of the company will not be liable for any loss suffered by any person for action taken on the basis of such information.

© B-QUAL Australia Pty Ltd. September 2022