### B-QUAL Food Safety B-QUAL Quality Assured

# A-QUAL

## **B-QUAL Australia Pty Ltd**

# **B-TRACE** Australia

#### June 2022 Newsletter Vol 22 issue 6

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#### Food safety:

The information provided below relates to NSW Food Authority only. We recommend that you check your own State or Territory for specific requirements.

The NSW Food Authority is the principal food safety agency, who works to ensure food produced, manufactured and sold in NSW is monitored and safe at each step it goes through from paddock to plate.

All food sold in NSW must be safe, suitable and correctly labelled to provide customers with the information they need to make informed decisions. It is the responsibility of all food businesses to conduct due diligence and remain up to date with legislative requirements to ensure they are producing safe food for their customers.

#### Obligations for food businesses:

All food businesses must comply with the relevant parts of the Food Standards code including:

- 1. Standard 3.2.2 Food safety practices and general requirements
- 2. Standard 3.2.3 Food premises and equipment
- 3. Part 1.2 labelling and other information requirements

Anyone in charge of a food business needs to identify food safety issues and implement measures to control risks.

For more information on NSW requirements contact NSW Food Authority ph. 1300 552 406

Or your own State or Territory Food Authority.

#### B-QUAL Food Safety B-QUAL Quality Assured

#### **TRUST YOUR HONEY!**

By Professor Sharon Purchase. Head of Business School, Marketing, University Of Western Australia.



Australian honey is some of the purest in the world

Australian honey is one of the few honeys still collected from native bushland and forests and is considered some of the purest in the world. Additionally, due to our strict biosecurity measures, it is also free from most honeybee diseases negating the use of husbandry chemicals and antibiotics.

The value of the industry is estimated at \$125 million for honey, beeswax, pollen, royal jelly, venom and honey bee exports, with a further \$14 billion farm gate value generated by 65% of Australia's agriculture wholly or partly reliant on honey bee pollination.

Honey is claimed to be the third most adulterated food product, through the addition of syrups, and so it is important for producers, exporters and consumers, to have confidence in the quality of Australian honey bee products.

Australia is one of the last places on Earth where we don't have diseases like varroa, so keeping diseases out is considered critical for the industry.

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#### THE LANDSCAPE

In 2018 there was a scare for the Australian honey industry when companies were accused of adulterating honey. It was concluded that existing honey testing methods, and their databases, lacked the rigour to support this accusation. So whilst no finding was made, it left the industry exposed and customers doubtful.



Professor Sharon Purchase leads the Chain of Custody team.

At this time, researchers led by CEO Dr Liz Barbour within the federally funded Cooperative Research Centre for Honey Bee Products (CRCHBP) at The University of Western Australia (UWA) were reviewing industry quality assurance and traceability methods. Head of Marketing Department, Professor <u>Sharon Purchase</u>, from the <u>UWA Business School</u> leads Research Program

4, <u>Chain of Custody</u>, as well as a several projects within the Program. She and her team were introduced to
B-QUAL Australia and found that large beekeepers were using a paper-based system for their audits.
B-QUAL Australia is a company established by the national industry body, Australian Honey Bee Industry Council (<u>AHBIC</u>) that sets the Australian beekeeping and packer standards. This includes traceability of products, management practices, HACCP and biosecurity. B-QUAL Australia certifies beekeepers and packer members who meet these industry standards.

Prior to the project starting, B-QUAL members were required to keep paper-based data on all extractions, hive locations, equipment and invoicing, with B-QUAL auditing every two years, and providing certification. The paper-based system did not allow for easy retrieval of data or the traceability of honey through the supply chain.

Understanding how honey flows through the supply chain and getting access to that data became very important for companies within the industry for continuous improvement. Thorough processes and rigorous data were also needed to improve traceability and for industry policy making.

With funding from the CRCHBP, Professor Purchase and her team started research project 22, <u>Chain of Custody</u> <u>for Honey Bee Products</u>, with the aim of automating the existing system, as well as including a self-biosecurity audit and extending honey quality assurance processes Australia-wide.

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#### **B-QUALITY** assured

The team applied business process management techniques to develop a new platform-based B-QUAL system which was delivered in 2021 to B-QUAL <u>members</u>. The auditable, digitised traceability web <u>APP</u> was based on BQUAL's paper-based system and field tested among beekeepers and producers in June 2021. It is easy to use and improves on the old system with further add-ins around better industry benchmarking and enhanced biosecurity access.



The B-QUAL APP is easy to use and available to Australian beekeepers

An immediate add-in to the database was from CRCHBP Program 1 led by UWA's A/Prof Bryan Boruff's, which was the Australian melliferous (honeybee) flora database. Correct scientific identification of the flora was required for the traceability

of honeybee products from field to shelf.

The team also modified the system to offer smaller beekeepers with a desk-auditing system, **B-Trace**, which focusses on food health standards (HACCP) and honeybee biosecurity check system critical for maintaining Australia's bee health.

#### Impact on stakeholders

The new **B-Trace** desk-audit system was rolled out more broadly in February 2022 and broadens the reach of beekeepers adhering to best practice policies and to maintain the quality and reputation of Australian honeybee products.

#### **Beekeepers and packers**

For members, the system provides a quicker, more efficient way of gathering, processing, tracing and analysing data for audit and for business and productivity improvements. Beekeepers can now access their own data for analysis, such as honey yield across the years and seasons. Large and small operators can now get a good understanding of how their practices and honeybee product production comes together over each year.

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For **B-Trace** members, the APP offers a cost-effective way of gaining certification and adhering to biosecurity and food standard codes.

Packers can now improve their own quality assurance processes and product traceability by encouraging their suppliers to use either the B-QUAL or B-Trace system.

Good beekeepers already have a gut feel. Now they'll have some data to support that. Prof. Sharon Purchase, UWA

#### Industry and government agencies

This digitised B-QUAL and **B-Trace** system is capturing the attention of state and national agriculture departments, including the WA Department of Primary Industries and Regional Development (<u>DPIRD</u>) as well as larger honey companies looking to improve quality assurance processes in their supply chain. Both the B-QUAL and **B-Trace** automatically report any biosecurity incidents to State Government Biosecurity Departments, in line with the <u>2015 Biosecurity Act</u>.

Previously, honey yield was benchmarked via the hive, but a hive varies from state to state and within a state. The new system allows yield to be benchmarked according to the frames within a hive, using a standard frame as the unit. Where bigger frames are used, the system automatically re-calculates yield.

If ever required for legal or policy argument, beekeepers could easily supply this information to show trends of honey yields within states and within biogeographical regions.

Over time, the government will gain an understanding of the yield of our iconic, really high-end honeys and how much that is worth to Australia.

#### **B-QUAL auditors**

Auditors can now process paperwork before they leave their office, making the on-site auditing a more cost effective and timely process. The **B-Trace** audit is designed to be desktop.

#### Consumers

Data on changes and comparisons in yield and quality of honey can be used to understand the value of the highend native bush and forest honeys and help promote Australian honey to the local and export market. Consumers can be assured that the honey has been through a rigorous process of traceability and authentication and is of the highest quality.

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The B-QUAL APP is easy to use and available to Australian beekeepers

This system is really important to consumers because you need to trust your honey. You need to know that your honey is the best in the world.

Prof. Sharon Purchase, UWA

#### Characterising Australian honey

In collaboration with B-QUAL Australia and the CRCHBP, with additional support from a Traceability Grant from Department of Agriculture, Water and Environment, the next step of honey assurance is being implemented.

Article by Professor Sharon Purchase. UWA

The Project 4-EJEGPFF – Quality assured Australian Honey Bee Products and Traceability program is drawing to completion on June 30<sup>th</sup> 2022. The program funded by the Australian Government Department of Agriculture, Water and Environment) DAWE has been able to achieve all its aims and produce good scientific results of Australian honey and build on existing industry processes.

A full project report will be issued to the industry late July.

I would take this opportunity to thank our colleagues at the University Of Western Australia, and CRCHBP who have worked tirelessly with B-QUAL to achieve such a great result and successful program.

In particular; Prof Sharon Purchase (UWA) – Project Leader, Cameron Wright (SquareCode) Robert Banks (UWA), Dr Zeenat Abdoolakhan (UWA) A/Prof Bryan Boruff (UWA), Giles Knight (UWA) Josh

Grant (SquareCode) and of course all those beekeepers who sent samples of such a wide range of Australian

honey; thank you all, for a great effort. I have enjoyed working with this incredible team, thanks to all

Don Muir.

Much of what we have achieved this year has been made possible by the ongoing support of our sponsors.

#### Please support those who support us.









#### **B-QUAL** *Quality Assured*

#### Can robotic beehives help end the global food shortage?



Even if bees only produced honey for all of our favourite treats, or just pollinated coffee trees for our morning coffee, they would still be a highly valued food producer. Their impact on the global food system goes well beyond that though. According to Forbes, researchers estimate that bees help pollinate more than a third of the food grown on the planet. Bee populations have been in sharp decline in recent years however, and one company is hoping that robotics and AI (Artificial Intelligence) innovations can help.

According to Beewise CEO and co-founder Saar Safra, honey bee populations are dropping at an unprecedented rate. "Just 40 years ago, the annual colony loss rate was a mere 3%. Today, it's more than 35%. When this rate surpasses 50%, the world will be unable to sustain the bee population," Mr Safra told Forbes.

According to Forbes, honey bee populations have been in decline due to factors such as intensive agriculture, pesticides, pollution, climate change diseases and pests, and urbanisation. It's a multi-pronged threat to the global food system that needs a radical response.

The Israel based Beewise claims that they have a new invention that will do just that. They hope to make farming honeybees easier than ever, and stop the global decline in its tracks.

In a 12-square- meter box called a Beehome, a system of robots and AI work together to play host to thousands of honeybees. Beehome is the world's first robotic beehive, and allows the hive population to be monitored.

The unassuming hive looks like a white garden shed with colourful slots allowing bees to enter and exit, and solar panels on the roof that power the machine. According to Forbes, the box is fire proof, flood proof, and bars entry to harmful pests like Asian wasps.

Source: Tasting Table.

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#### Anti-counterfeiting your product's packaging for hive to table delivery



# Protect your label and avoid forgery. Copying labels is easily done - with a well-thought out strategy your brand is safeguarded

Judgement of a honey product is largely based on the information supplied by the label on the jar. The connection of the label to the honey within the jar is the work of traceability and chemistry, but what happens when the label is tampered with and the two do not align?

This workshop will guide you through simple techniques to identify your risk, learn about the ways you can protect your label and create a solution for customer trust in your brand.

Held on-line in two three hour sessions, on Thursday and Friday, this workshop will enable you to work with the tools provided to reach your solutions. Confidentiality is respected, as the goal of the workshop is for you to arrive at a solution you can implement.

This workshop is for all Australian beekeepers packing their honey, or packers packing beekeeper honey. Please register for both days for the complete workshop.

DATE: Thursday 7<sup>th</sup> and Friday 8<sup>th</sup> July 2022

TIME: 12.30 – 3.30 pm WST OR 10.30 am – 1.30 pm EST

**FREE REGISTERATION**: Eventbrite <u>https://www.eventbrite.com.au/e/anti-counterfeiting-your-products-packaging-for-hive-to-table-delivery-tickets-356191878497</u>

**COST:** \$50 per person (\$25 per day). (FREE for B-QUAL and B-TRACE members, but still use link above to register for free tickets).





Ausindustry Cooperative Research Centres Program



