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TOTAL ACTIVITY (TA)

Company

Bee Happy Apiaries

Certified Results Record

This TA test was conducted using the basic method described by Green et al. (2020)[1], adapted from the standard broth microdilution method detailed by the Clinical and Laboratory Standards Institute (2018)[2]. The minimum inhibitory concentration (MIC) of a honey dilution series was tested against two organisms, *Staphylococcus aureus* QAP275 and *Escherichia coli* QAP14.1, obtained from the Royal College of Pathologists of Australasia Quality Assurance Program. These were assessed using a spectrophotometer microplate reader at 600 nm. The plate was incubated for 20 hours at 36 °C, after which the optical density was re-evaluated. A test control was included. Relative growth was calculated and expressed as a percentage. An Antibacterial Activity Lite Value (AAV Lite) was generated, and this result was converted to a TA score.

Results Table

Sample ID	Test Date	Company Batch ID	AAV	AAV Lite	TA
YTS-0598]	2/06/2026	OL4210426	633.68	356	42

Honey Lab Technical Lead

Name: Dr Khairul Islam

Signature:

Report Date: 10/06/2026

[1] Green KJ, Dods K, Hammer KA (2020) Development and validation of a new microplate assay that utilises optical density to quantify the antibacterial activity of honeys including Jarrah, Marri and Manuka. PLoS ONE 15(12): e0243246.https://doi.org/10.1371/journal.pone.0243246

[2] Clinical and Laboratory Standards Institute. Methods for Dilution Antimicrobial Susceptibility Tests for Bacteria that Grow Aerobically, 11th Edition. CLSI document M07-A11. Clinical and Laboratory Standards Institute, Wayne, PA, USA. 2018.