Jarrah Honey TA15+

Eucalyptus marginata (Jarrah) · October – December 2024

Southwest Australia Biodiversity Hotspot, Western Australia

Batch number	**CL515012415**
Test date	April 2025
Testing protocol	Pre-extraction and post-packing
Extraction method	Cold extracted — unfiltered, unpasteurised
Pack sizes	80g / 170g / 250g / 300g
Halal practices	Yes — Halal practices observed throughout production

HEADLINE RESULTS

TA15+	450	<0.01
Total Activity Phenol equivalence	Antioxidant Activity (mg AAE/kg) DPPH radical scavenging assay	Glyphosate (mg/kg) Below detection threshold

FLORAL PURITY AND ORIGIN

Parameter	Method	Result	Laboratory	Status
Phenolic Fingerprint	HPTLC phenolic fingerprinting assay	Chromatographic banding pattern match E. marginata monofloral	Y-Trace	PASS
Botanical Origin		**Jarrah**		**PASS**
Biogeographical Origin	Classification according to the IBRA	Western Australia: IBRA bioregion not specified	Y-Trace	PASS
Geographical Origin		**Western Australia**		**PASS**

BIOACTIVE PROFILE

Parameter	Method	Result	Research Institute
Glycaemic Index (GI)	Blood glucose response test	GI 52 – low GI classification	University of Sydney – SUGiRS
Probiotic Index	Gut microbiome benefit assay	0.91 – positive probiotic benefit	University of New South Wales
Antifungal Activity	Broth dilution antifungal assay	MIC range 1.5 - 3.5% (w/v)	University of Sydney
Phenolic Content	Folin–Ciocalteu assay	~50.58 ± 3.76 mg GAE/100 g	University of Western Australia
Flavonoid Content	$AlCl_3$ colorimetric assay	~39.3 ± 8.9 mg quercetin eq./kg	University of Western Australia
Anti-biofilm activity	Crystal violet inhibition assay	~40–90% biofilm reduction	University of Sydney

ANTIMICROBIAL ACTIVITY

Parameter	Method	Result	Laboratory	Status
Total Activity (TA)	OD600 microplate broth microdilution MIC assay	25 phenol equivalence	Y-Trace	PASS
Total Activity (TA)		**Exceeds TA15+ threshold**		**PASS**

ANTIOXIDANT ACTIVITY

Parameter	Method	Result	Laboratory	Status
Antioxidant Activity	DPPH radical scavenging assay	450.86 mg AAE/kg	Y-Trace	PASS
Antioxidant Activity		**450 AAE/kg**		**PASS**

CONTAMINANT SCREENING

Parameter	Method	Result	Laboratory	Status
Glyphosate	Residual herbicide screening	<0.01 mg/kg – not detected	Y-Trace	PASS
AMPA	Residual herbicide screening	<0.01 mg/kg – not detected	Y-Trace	PASS
Glufosinate	Residual herbicide screening	<0.01 mg/kg – not detected	Y-Trace	PASS
Pesticide Residues		**Undetected above threshold**		**PASS**
Arsenic	HITS-20-025 ICP-OES	<0.20 ppm – not detected	Holistic International	PASS
Cadmium	HITS-20-025 ICP-OES	<0.20 ppm – not detected	Holistic International	PASS
Lead	HITS-20-025 ICP-OES	<0.20 ppm – not detected	Holistic International	PASS
Mercury	HITS-20-081 ICP-OES	<0.02 ppm – not detected	Holistic International	PASS
Iron	HITS-20-025 ICP-OES	<0.20 ppm – not detected	Holistic International	PASS
Palladium	HITS-20-025 ICP-OES	<0.20 ppm – not detected	Holistic International	PASS
Zinc	HITS-20-025 ICP-OES	0.37 ppm	Holistic International	PASS
Toxic Metals		**Undetected above threshold**		**PASS**
Sulphite Reducing Clostridium	CMMEF Spread Plate	<10 Cfu/g – not detected	Holistic International	PASS
Yeast & Mould	US FDA Spread Plate	<10 Cfu/g – not detected	Holistic International	PASS
Microbiology		**Undetected above threshold**		**PASS**

HONEY GSO 147:2018-REF LIMIT

Parameter	Method	Result	Laboratory	Status
Acidity	GSO 122:1990 Titration	12..08 mEQ/1000g	Holistic International	PASS
Diastase Activity	HITS-20-223 UV-VIS Spectrophotometer	14.65 schade units	Holistic International	PASS
Electrical Conductivity	HITS-20-185 Conductivity Meter	0.713 mS/cm	Holistic International	PASS
Hydroxymethylfurfural (HMF)	GSO 122:1990 UV-VIS Spectrophotometer	18.05 ppm	Holistic International	PASS
Moisture Content	HITS-20-166 Oven	14.32%	Holistic International	PASS
Sucrose Content	HITS-20-151 Calculation	0.85%	Holistic International	PASS
Total Fructose & Glucose Content	HITS-20-151 Titration	77.32%	Holistic International	PASS
Honey Standard		**Meets legal requirements**		**PASS**

INDEPENDENT TESTING LABORATORIES

Laboratory	Accreditation	Notes
ALS New Zealand	• International Accreditation New Zealand (IANZ) • ISO/IEC 17025 accredited laboratory	• Total Activity and antimicrobial potency testing. • The same laboratory that rates and certifies Manuka honey for the global market.
ChemCentre WA	• Accredited by NATA (National Association of Testing Authorities, Australia) • ISO/IEC 17025 accredited laboratory	• Western Australian Government analytical chemistry reference laboratory • One of Australia's highest-tier public analytical reference laboratories • Recognised for forensic, environmental, and chemical analysis integrity
Holistic International Testing Services	• ISO/IEC 17025 accredited laboratory	• UAE based specialising in regulatory compliance testing services (in food, beverage, cosmetic and pharmaceutical)
National Measurement Institute	• Is NATA (National Association of Testing Authorities, Australia) • ISO/IEC 17025 accredited laboratory	• Australia's national metrology authority (government institute) • Highest authority for measurement traceability in Australia • Establishes reference standards used by accredited laboratories
Y-Trace	• ISO/IEC 17025 accredited laboratory	• Specialises in analytical and trace testing services (often novel food and authenticity testing)

CONTEXT – HOW THIS BATCH COMPARES

Measure	This Batch (CL515012415)	Mānuka UMF™ 15+	Average Raw Honey
Total Activity	25.0 phenol eq.	15.0 phenol eq.	Varies – rarely tested at brand level (independent studies: typically 0 – 5 phenol eq.)
Antioxidant (mg AAE/kg)	450	Rarely tested – reported ranges in independent studies: typically 200 – 600	Rarely tested – reported ranges in independent studies: typically 50 – 300)
Glyphosate screening	<0.01 – not detected	Rarely tested – reported ranges in independent studies: typically 15 – 25% has detectable residues)	Rarely tested – reported ranges in independent studies: typically 25 – 55% has detectable residues)
Monofloral verified	Yes	UMF™ products verified via certification processes	Less commonly independently verified
COA available	Yes – per batch	Varies by brand	Not routinely available

Figures for mānuka and raw honey are derived from peer-reviewed literature and publicly available producer data. Values are presented for general context and may vary by study, region, and methodology.
Comparison is presented as context, not marketing.

DOCUMENT NOTE

This Independent Testing Summary is produced by Australian Wildflower and consolidates results from independent ISO/IEC 17025 accredited laboratory reports covering this batch. It is not a laboratory-issued Certificate of Analysis. The results presented are drawn directly and without alteration from the signed laboratory documents produced by the named facilities.

To request the original signed laboratory reports for this batch, contact: info@australianwildflower.au with your batch number.

This document does not constitute medical advice. Australian Wildflower makes no therapeutic claims. All results are as recorded by the named independent laboratories.