



ANALYSIS REPORT

Client:	Biosota Australian Wild Honey	Lab No:	1719267	SPv1
Contact:	Andrey Zubko C/- Biosota Australian Wild Honey 27/4-6 Hamley Road Mount Kuring-gai New South Wales 2080 AUSTRALIA	Date Received:	07-Feb-2017	
		Date Reported:	10-Feb-2017	
		Quote No:		
		Order No:		
		Client Reference:		
		Submitted By:	Andrey Zubko	

Sample Type: Honey

Sample Name:	Manuka NPA 5+	Manuka NPA 10+	Manuka NPA 15+	Manuka NPA 20+	
Lab Number:	1719267.1	1719267.2	1719267.3	1719267.4	
Individual Tests					
NPA (Non Peroxide Activity)	% Phenol Equivalent	8.1	14.7	18.5	28.0
3-in-1 Honey Analysis					
Dihydroxyacetone	mg/kg	330	980	1,230	1,420
5-hydroxymethylfurfural (HMF)	mg/kg	25	24	41	65
Methylglyoxal	mg/kg	184	499	726	1,443

SUMMARY OF METHODS

The following table(s) gives a brief description of the methods used to conduct the analyses for this job. The detection limits given below are those attainable in a relatively clean matrix. Detection limits may be higher for individual samples should insufficient sample be available, or if the matrix requires that dilutions be performed during analysis.

Sample Type: Honey

Test	Method Description	Default Detection Limit	Sample No
3-in-1 Honey Analysis	Water extraction, derivatisation, UPLC-UV analysis (dihydroxyacetone, 5-hydroxymethylfurfural, methylglyoxal). Analysis performed at Hill Laboratories - Food & Bioanalytical Division, Waikato Innovation Park, Ruakura Lane, Hamilton.	1.0 - 10 mg/kg	1-4
NPA (Non Peroxide Activity)	NPA is calculated from methylglyoxal using a correlation curve based on published data for NPA and the primary active ingredient, methylglyoxal. (1,2) Analysis performed at Hill Laboratories - Food & Bioanalytical Division, Waikato Innovation Park, Ruakura Lane, Hamilton. (1) Isolation by HPLC and characterisation of the bioactive fraction of New Zealand manuka (<i>Leptospermum scoparium</i>) honey. C. J. Adams, et al. Carbohydrate Research 343 (2008) 651-659. (2) Corrigendum to "Isolation by HPLC and characterization of the bioactive fraction of New Zealand manuka (<i>Leptospermum scoparium</i>) honey" [Carbohydr. Res. 343 (2008) 651]. C. J. Adams, et al. Carbohydrate Research 344 (2009) 2609.	1.0 % Phenol Equivalent	1-4

These samples were collected by yourselves (or your agent) and analysed as received at the laboratory.

Samples are held at the laboratory after reporting for a length of time depending on the preservation used and the stability of the analytes being tested. Once the storage period is completed the samples are discarded unless otherwise advised by the client.

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Bruce Morris PhD
Senior Technologist - Food & Bioanalytical



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