



## ANALYSIS REPORT

<b>Client:</b>	International Food Europe SRL	<b>Lab No:</b>	1868801	SPv2
<b>Contact:</b>	Francesco De Santis C/- International Food Europe SRL Viale Giulio Cesare 92 Roma 00192 ITALY	<b>Date Received:</b>	31-Oct-2017	
		<b>Date Reported:</b>	03-Nov-2017	(Amended)
		<b>Quote No:</b>		
		<b>Order No:</b>		
		<b>Client Reference:</b>		
		<b>Submitted By:</b>	Aurel Braguta	

### Sample Type: Honey

<b>Sample Name:</b>	Batch 17MA4				
<b>Lab Number:</b>	1868801.1				
Individual Tests					
NPA (Non Peroxide Activity)	% Phenol Equivalent	13.3	-	-	-
3-in-1 Honey Analysis					
Dihydroxyacetone	mg/kg	710	-	-	-
5-hydroxymethylfurfural (HMF)	mg/kg	15.1	-	-	-
Methylglyoxal	mg/kg	423	-	-	-

### Analyst's Comments

**Amended Report:** This report replaces an earlier report issued on 01 Nov 2017 at 4:07 pm  
Reason for amendment: Amended client details and sample name as requested.

## 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	Aqueous extraction, derivatisation. Analysis by UPLC-UV (dihydroxyacetone, 5-hydroxymethylfurfural, methylglyoxal).	1.0 - 10 mg/kg	1
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). (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

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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