



Certificate of Analysis



Lab Reference: 24-05905
Submitted by:
Date Received: 23/02/2024
Testing Initiated: 26/02/2024
Date Completed: 6/03/2024
Order Number:
Reference:

Report Comments

This report only contains the top 5 pollen types in your honey sample.
Samples were collected by yourselves (or your agent) and analysed as received at Analytica Laboratories (or at the subcontracted laboratories, when applicable). Samples were in acceptable condition unless otherwise noted on this report.
Specific testing dates are available on request.

Results Summary

24-05905-1
24TLP

Floral Pollen Type	%
Manuka/Kanuka type	89.2
Vipers bugloss (Echium)	1.7
Clover type (Trifolium)	0.7
Dandelion type (Taraxacum)	0.2
Rata/Pohutukawa type (Metrosideros)	0.2
Unidentified	7.9
Non-nectar Plant Pollen*	0.2
Total Pollen Counted (based on nectar-bearing plants)	406
Pollen Concentration (per 10 grams of honey)	802,524

Pollen Count Approver:

Michelle Hawke M.Sc.
Foods Operations Manager

Method Summary

Pollen Count

Pollen is extracted from honey samples supplied, followed by acetolysis of pollen and microscopical analysis to differentiate and measure pollen grains of different floral types.

* Due to this being a honey sample, calculations are based off nectar bearing plant pollens. Non-nectar plant pollens have been removed from final calculations when determining percentage ID of Floral Pollen Types.

Testing was subcontracted out to MS3 Solutions LTD.



Certificate of Analysis



Lab Reference: 24-05905
Submitted by:
Date Received: 23/02/2024
Testing Initiated: 26/02/2024
Date Completed: 27/02/2024
Order Number:
Reference:

Report Comments

Samples were collected by yourselves (or your agent) and analysed as received at Analytica Laboratories (or at the subcontracted laboratories, when applicable). Samples were in acceptable condition unless otherwise noted on this report.
Specific testing dates are available on request.

Results Summary

MPI Manuka Classification for Honey*

Laboratory ID	Sample ID	MPI Manuka Classification*
24-05905-1	24TLP	MONOFLORAL MANUKA

MPI Manuka Classification for Honey* Approver:

Gurmeet Singh, Dip. Tech. (Sci)
Senior Technician

MPI Manuka DNA in Honey

Laboratory ID	Sample ID	Manuka DNA
		<i>Units</i> Reporting Limit
		Cq
24-05905-1	24TLP	20.31

MPI Manuka DNA in Honey Approver:

Alesha Avery, BSc(Tech),
Laboratory Technician

MPI Manuka Markers in Honey

Laboratory ID	Sample ID	4-Hydroxyphenyllactic acid (4-HPLA)	2-Methoxybenzoic acid (2-MBA)	2'-Methoxy acetophenone (2'-MAP)	3-Phenyllactic acid (3-PLA)	
		<i>Units</i> Reporting Limit	mg/kg 0.80	mg/kg 0.80	mg/kg 0.80	mg/kg 20
24-05905-1	24TLP	6.6	11	16	600	

All tests reported herein have been performed in accordance with the laboratory's scope of accreditation with the exception of tests marked *, which are not accredited.
This test report shall not be reproduced except in full, without the written permission of Analytica Laboratories.

MPI Manuka Markers in Honey

Laboratory ID	Sample ID	4-Hydroxyphenyllactic acid (4-HPLA)	2-Methoxybenzoic acid (2-MBA)	2'-Methoxyacetophenone (2'-MAP)	3-Phenyllactic acid (3-PLA)
	<i>Units</i>	mg/kg	mg/kg	mg/kg	mg/kg
	<i>Reporting Limit</i>	0.80	0.80	0.80	20

MPI Manuka Markers in Honey Approver:



Gurmeet Singh, Dip. Tech. (Sci)
Senior Technician

Method Summary

MPI Manuka Classification For classification as monofloral manuka, the following chemicals all need to be present and at these levels (Animal Products Notice - General Export Requirements for Bee Products, 2018):

- 4-hydroxyphenyllactic acid at a level greater than or equal to 1mg/kg
- 2-methoxybenzoic acid at a level greater than or equal to 1mg/kg
- 2'-methoxyacetophenone at a level greater than or equal to 5mg/kg
- 3-phenyllactic acid at a level greater than or equal to 400mg/kg

And the DNA level from manuka pollen is less than Cq 36, which is approximately 3fg/µL.

For classification as multifloral manuka, the following chemicals all need to be present and at these levels:

- 4-hydroxyphenyllactic acid at a level greater than or equal to 1mg/kg
- 2-methoxybenzoic acid at a level greater than or equal to 1mg/kg
- 2'-methoxyacetophenone at a level greater than or equal to 1mg/kg
- 3-phenyllactic acid at a level greater than or equal to 20 mg/kg but less than 400mg/kg

And the DNA level from manuka pollen is less than Cq 36, which is approximately 3fg/µL.

MPI Manuka Markers Solvent extraction, LC-MS/MS analysis in accordance with in-house procedures.

Analytica Laboratories Ltd., is approved by the New Zealand Ministry of Primary Industries to conduct this analysis under the Recognised Laboratory Programme (MPI Technical Paper 2017/30 Modified, RLP Method 10.05)

Leptospermum scoparium DNA (PCR) Samples were analysed as received by the Laboratory for Manuka Pollen DNA by pollen DNA extraction followed by qPCR in accordance with the MPI Technical Paper 2017/31 (modified) (96 well method with magnetic bead extraction). Analytica Laboratories Ltd., is approved by the New Zealand Ministry of Primary Industries to conduct this analysis under the Recognised Laboratory Programme (RLP Method 10.04).

The DNA component of the MPI Manuka Honey Definition requires a Cq value of less than 36 to qualify for either a monofloral or multifloral manuka honey.



Certificate of Analysis



Lab Reference: 24-05905
Submitted by:
Date Received: 23/02/2024
Testing Initiated: 26/02/2024
Date Completed: 27/02/2024
Order Number:
Reference:

Report Comments

Samples were collected by yourselves (or your agent) and analysed as received at Analytica Laboratories (or at the subcontracted laboratories, when applicable). Samples were in acceptable condition unless otherwise noted on this report.
Specific testing dates are available on request.

Results Summary

Glyphosate in Honey

Laboratory ID	Sample ID	Glyphosate	Glufosinate	Aminomethyl phosphonic acid
	<i>Units Reporting Limit</i>	mg/kg 0.010	mg/kg 0.010	mg/kg 0.010
24-05905-1	24TLP	<0.010	<0.010	<0.010

Glyphosate in Honey Approver:

Edie Thomas, M.Sc.
Technologist

Method Summary

Glyphosate

Solvent extraction and FMOC derivatisation followed by LC-MS/MS analysis in accordance with in-house procedures. Analytica Laboratories Ltd., is approved by the New Zealand Ministry of Primary Industries to conduct this analysis under the Recognised Laboratory Programme (RLP Method 8.47.1).