



MDA_V025 v2.0

HONEY METAGENOMIC DNA ANALYSIS. TEST REPORT	
SAMPLE INFORMATION	
Laboratory ID	C446H
Sample number	Raw honey
Client name	UAB "Status Fortis"
Client e-mail	info@statusfortis.lt
Registration time / Reporting time	03.06.2025/10.07.2025

REFERENCE INFORMATION	
International Database of Genomes (IDG)	IDG_v1.0 (May 2025)
Number of studied objects in the IDG	831 790
Number of plants in the IDG	147 325
Number of bacteria in the IDG	108 038
Number of fungi in the IDG	88 221
Number of insects, mammals, etc in the IDG	362 808
Metagenomic Database of Authentic honey	MDA2_v1.1 (July 2025)
Number of samples in the MDA	1141

RESULTS	
Number of DNA sequences per sample	8 627 342
Number of detected studied objects	240 (bracken)
AUTHENTICITY ANALYSIS	
Conclusion of the authenticity analysis	AUTHENTIC
SUPPLEMENTARY MATERIALS	
Krona plot, interactive chart (HTML file)	An interactive Krona plot reflects all the organisms detected in the analyzed sample and their quantities through the percentages of their detected DNA sequences. The results are presented in an HTML file that opens in the browser.

COMMENTS

The definition of authenticity in this report is as follows:

Authentic: The DNA profile of the analyzed sample is similar (sensitivity >99.9%) to the profiles of Celvia CC's created Metagenomic Database of Authentic honey (MDA2_v1.1). The sample has a very high probability of being genuine honey.

Non-authentic: The DNA profile of the analyzed sample is dissimilar (specificity 98.5%) to the profiles of Celvia CC's created Metagenomic Database of Authentic honey (MDA2_v1.1). The sample has a very high probability (0.985) of being non-genuine honey and a very low probability (0.015) of being incorrectly reported.

Decision rule: A sample is considered authentic if the taxonomic similarity of its DNA profile exceeds a predefined threshold compared to the authentic honey DNA profiles stored in the Celvia CC MDA2_v1.1 database. If the similarity remains below the threshold, the sample is considered non-authentic.

Important information

Honey Metagenomic DNA Analysis (MDA v2) describes the honey's composition and authenticity. The DNA profile is compared against the different types of honey DNA profiles in the honey DNA profile database created by Celvia CC (Metagenomic Database of Authentic honey, MDA2_v1.1). The sensitivity of the MDA v2 method exceeds 99.9%, and its specificity is 98.5%. MDA v2 is an untargeted analysis of all DNA sequences present in honey. Therefore, the results may differ from those obtained using other methods, such as pollen analysis, PCR-based DNA metabarcoding, NMR, etc. All results apply solely to the tested sample as provided by the customer. Celvia CC takes no responsibility for any interpretations, conclusions, or actions based on our analysis results. Reverse engineering of the analysis process or methodology is strictly prohibited. In the case of any disputes, all matters will be governed and resolved by the laws of Estonia. Without the laboratory's permission, only full reproduction of the report is allowed.

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