More information regarding consultation on the definition for mānuka honey and proposed export requirements

Mānuka honey definition

Why are some samples not passing the DNA aspect of the definition?

Some companies have contacted MPI with information about honey samples that are failing the DNA test but passing the chemistry test for mānuka honey.

We have been looking at a lot of test results provided by the industry, and while the majority of samples that pass the MPI chemistry also pass the DNA test, there are some samples that are giving unexpected results for the DNA test.

When a new test is introduced, it is not unusual to make adjustments to laboratory methods, to account for some samples that behave differently. This is part of routine laboratory processes. In conjunction with DNA researchers (dnature), MPI has been looking at a potential minor modification to a reagent used in the DNA test. However, before we make any changes, we need to investigate this further.

MPI will let testing laboratories and industry know as soon as possible if we plan any changes as a result of this work.

Should businesses keep testing while MPI is investigating the DNA test?

We recommend that honey samples submitted for DNA testing to commercial laboratories be held under suitable storage conditions while MPI and dnature complete work to assess a potential modification to the test.

If we do plan to make any changes we will let industry know as soon as possible.

If you've tested your honey and it has passed, you won't have to test it again. However, if your honey was tested at an MPI-recognised laboratory and passed the chemistry but failed the DNA test, you may wish to have it re-tested for the DNA component. MPI will deal with this on a case by case basis.

Other reasons why a honey might fail the DNA test

Note, there may be other reason why a honey that is tested to the definition fails the DNA test. It may be that the honey is, in fact, not mānuka. Alternatively, unexpected test results may be to one or more of the reasons explained in the table below. We have also listed actions you can take to minimise these problems.

Reason for unexpected results:	Action you can take:
Homogenisation error – the drums you are sampling from are not homogenous	Melt the honey and mix well prior to sampling

Reason for unexpected results:	Action you can take:
Sampling error – the sample you have taken is not representative of the drum	If it is possible that the drum is not homogenous, take multiple samples from one drum, or melt the honey and mix well prior to sampling
Sub-sampling for laboratory use – the sub-sample taken is not representative of the original sample	Make sure that any sub-sampling is done under controlled conditions in a recognised laboratory
Laboratory practices	Only use an MPI recognised laboratory that is accredited to complete the test

If you still have concerns, you are welcome to forward test results and the information requested below to MPI at mānuka.honey@mpi.govt.nz so that we can further understand and trouble-shoot any possible issues.

If you are able to, please include the following information with any data you send us:

- laboratory that tested the honey, and date it was tested;
- region(s) where honey sample came from;
- age of honey;
- storage conditions for aging – temperature and time;
- stage in processing – drum or retail ready;
- temperatures and time used in extraction and processing;
- homogenisation process – how and length of time; and
- testing data parameters for each honey – HMF, DHA, MG, 2'-MAP, 2-MBA, 4-HPA, 3-PLA, mānuka DNA Cq, internal control Cq

How did MPI know that the honey samples used in the science programme were really mānuka honey?

We didn't, which is why we needed to undertake the science programme. The foundation of the science programme was to identify attributes or markers that could be linked to the source plant, *Leptospermum scoparium*. To generate information on attributes that would be representative of *L. scoparium* across New Zealand we set out to collect plants from the different regions of New Zealand. We also made sure we collected other plant species so we could compare what we found in *L. scoparium* with other plants. To ensure the correct plant species were collected, MPI used experts to identify and collect the plants in the field. The plant samples were also independently verified to confirm the species identification. We tested the plants for the attributes we were evaluating and then analysed the data to select which attributes would help us separate *L. scoparium* from other plants.

We also needed to test for the same attributes in honey samples and analyse the data. So similar to the plants samples, we sourced honey from across New Zealand from a number of different floral types. We did not rely on the identification of the honey type as described by the supplier. Instead we analysed all the data, from both plant and honey samples, in combination and considered what we knew about the plant and used the attribute patterns that were similar in the honey types we tested. We were then able to group together 'like' with 'like' honey samples and in simple terms the attributes that honey samples had in common helped determine the identification criteria.

The proposed general requirements for the export of bee products notice

Will the definition be accepted by overseas markets?

Some overseas markets have signalled to MPI that when mānuka honey is being exported, they expect MPI certification to support that it is in fact mānuka honey. These markets are aware of our process to develop the definition.

At present, no overseas authority has set any import requirements for mānuka honey, and this has not changed since the release of the definition for mānuka honey.

MPI has a trusted reputation for implementing robust food safety systems and we work closely with overseas regulators.

What is the purpose of the proposed requirement that no honey is extracted from brood frame?

Brood combs have the ability to absorb pesticide residues and other contaminants. This requirement aims to ensure that no residues are found in honey.

Why is MPI proposing traceability requirements for individual supers?

MPI's goal is to create a traceability system that will provide MPI oversight of the whole supply chain, to give MPI evidence about the origin of honey and the quantity being produced from each apiary site.

We have received feedback from a number of beekeepers and operators about practical concerns with tracing honey to the super level. MPI is happy to consider alternative proposals. If you have suggestions for how oversight of the supply chain can be established through another traceability system, please share this with us by emailing mānuka.honey@mpi.govt.nz.

Is the feeding of hives limited to sugar or does it include other feeds?

MPI proposes that *nothing other than honey is fed to bees during the harvest season.* This is to ensure that when supers are on a hive for the purposes of honey collection that no artificial substance ends up in the honey.

We acknowledge that different weather or environmental conditions may require feeding hives to ensure the survival of the bees. Feeding bees to ensure the survival of the hive is currently provided for in the draft notice.

Why are beekeepers required to list with MPI when they are already listed with the American Foulbrood (AFB) Pest Management Plan?

A listing requirement for beekeepers supplying bee products for export to markets that require official assurances has been in place since 2016. The discussion document proposes extending this requirement to beekeepers supplying products for export to all markets. Information held in the AFB database is collected under the AFB Pest Management Plan.

This Plan is made under the Biosecurity Act 1993 for biosecurity purposes so using the information in the AFB database for export purposes under the Animal Products Act 1999 would require the permission of every beekeeper. Even if a beekeeper gives permission, there is no safeguard if he/she decides to withdraw it.

How will MPI implement the definition in the domestic market?

New Zealand companies have clear obligations (such as under the Fair Trading Act 1986) to ensure product sold on the domestic market is true to label and that any label claims can be substantiated and are not misleading.

MPI is developing 'A guide to New Zealand Honey Labelling' to provide guidance on labelling to meet the existing rules of the Australian New Zealand Food Standards Code and the Fair Trading Act, as they apply to domestic honey.

Any changes to regulatory requirements for honey sold on the domestic market will require further policy work. If there are any proposals for changes in the future, we will consult industry at that point.