

# MĀNUKA HONEY SCIENCE DEFINITION

## TEST FOR MONOFLORAL MĀNUKA HONEY

The test for monofloral mānuka honey requires all of the five attributes. If the honey fails to meet 1 or more of the attributes, it is not monofloral mānuka honey – see test for multifloral mānuka honey.

### TEST #1: CHEMICAL TEST

The following chemicals all need to be present:

**3-Phenyllactic acid**  
at a level greater than or equal to 400 mg/kg

**2'-Methoxyacetophenone**  
at a level greater than or equal to 5 mg/kg

**2-Methoxybenzoic acid**  
at a level greater than or equal to 1 mg/kg

**4-Hydroxyphenyllactic acid**  
at a level greater than or equal to 1 mg/kg

### TEST #2: DNA TEST

DNA from mānuka pollen (\*DNA level required is less than Cq 36, which is approximately 3 fg/μL)

A combination of five attributes (4 chemicals, 1 DNA marker from mānuka pollen) are required to authenticate monofloral and multifloral mānuka honey.

These attributes can be identified using two laboratory tests.

## TEST FOR MULTIFLORAL MĀNUKA HONEY

The test for multifloral mānuka honey requires all of the five attributes. If the honey fails to meet 1 or more of the attributes, it is non-mānuka.

### TEST #1: CHEMICAL TEST

The following chemicals all need to be present:

**3-Phenyllactic acid**  
at a level greater than or equal to 20 mg/kg but less than 400 mg/kg

**2'-Methoxyacetophenone**  
at a level greater than or equal to 1 mg/kg

**2-Methoxybenzoic acid**  
at a level greater than or equal to 1 mg/kg

**4-Hydroxyphenyllactic acid**  
at a level greater than or equal to 1 mg/kg

### TEST #2: DNA TEST

DNA from mānuka pollen (\*DNA level required is less than Cq 36, which is approximately 3 fg/μL)