# HONEY TECHNICAL NOTE

# Understanding your Pollen Count results





Pollen counting is a great way for you to find out what types of flowers your bees are visiting. This test can be used to verify the floral origins of your non-manuka honeys. Some overseas markets require floral origin testing to ensure that the 'NZ Honey' they are buying has floral sources that are expected in New Zealand.

#### Under and Over representation of pollen counting

Representation of pollen in the honey will depend on two things:

## The pollen collection of the bees

Bees will leave the hive to collect nectar, but during their forage they will unintentionally collect pollen as they have a static charge which allows pollen to stick to them. Throughout their forage they will clean themselves, creating a ball of pollen under their abdomen/hind legs. This pollen will be mixed into the honey and used as a protein source for the broad

## The biology of the flower

Flowers consist of many components, but bees only focus on two - the anther (where pollen is found) and the nectaries (where nectar is found). Now if a bee is collecting nectar, the amount of pollen they will collect will depend on the positioning of the anthers. See the images below showing the difference between a manuka flower and a Rewarewa flower. The Rewarewa anthers are not touching the bee so it will be less likely to pick up as much pollen as the manuka flower since the bee is all over the manuka anthers.

It is important to keep this in mind because the minimum pollen frequency for a Rewarewa honey is 10% whereas a Manuka honey needs 70%. This document works as a great reference piece when interpreting your pollen count results: https://apinz.org.nz/wp-content/uploads/2017/09/New-Zealand-Honey-characteristics-10June2008.pdf

#### Pollen Types we can test for

If we detect pollen that is not on this list, it will show up as 'unidentified'.

- Carrot/Fennel
- Clover
- Dandelion
- Five Finger
- Flax
- Heath type
- Hinau
- Kamahi
- Manuka/Kanuka type
- Matagouri
- Mint. Thyme. Lavender, ets
- Pigeonwood type
- Rata/Pohutukawa type
- Rewarewa
- Rubus type
- Southern Beech type
- Tawari
- Tawheowheo (Quintinia)
- Trefoil
- Viper bugloss
- Wattle
- Willow