



**Application to release two new
biocontrols to combat wasps**



Apiculture NZ represents the interest of beekeepers and honey bees in New Zealand.

The value of the apiculture industry to New Zealand includes:

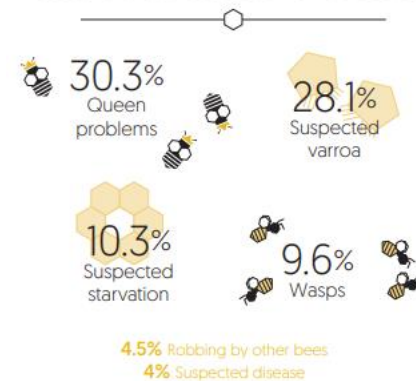
- \$425 million worth of honey exports (year ended Aug 2020)
- Overall industry value of \$5 billion from honey and other bee products, and indirectly through pollination



Wasps are a significant pest for the apiculture industry

- Wasps have consistently ranked as the third or fourth cause of colony loss in recent NZ Colony Loss Surveys.
- In 2019, beekeepers attributed the loss of 7,869 colonies to wasps
- The cost of this loss in 2019 is close to \$4 million annually
- Wasps also affect foraging bees resulting in lost honey production and/or pollination efficiency

Losses are attributed to various causes



From the 2019 NZ Colony Loss Survey, Landcare Research, Manaaki Whenua



From the 2018 NZ Colony Loss Survey, Landcare Research, Manaaki Whenua

ApiNZ supports the introduction of *Volucella inanis* and *Metoecus paradoxus* as widespread suppression of wasp populations would be beneficial to bee health and productivity, increasing profitability. The key gains would be:



Wasps on VespeX. Photo: Richard Toft.

- Decreasing total hive deaths, potentially by 12% (based on Colony Loss data)
- Increasing productivity of hives as bees need to use less resources on defending hives from wasp attacks
- Reduction in hive management required in high wasp population areas
- Improvement to general foraging environment of honey bees particularly in beech forests and river beds

ApiNZ sees limited adverse effects to health of honey bees based on the risk assessment provided in the application for introduction of the biocontrols.

One consideration is potential competition for food resources by *Volucella inanis* where the adult feeds on nectar and pollen, but this is unlikely to have an effect due to the limited population size of the biocontrol.

