

# Impact of *Vespula* wasps on New Zealand pollination networks

Theo Van Noort \*<sup>1</sup>

<sup>1</sup> University of Auckland

Eligible for student prize

International studies have shown that some species of *Vespula* have significant impacts on pollination networks, providing effective pollination in some cases, while in other cases nectar robbing and pollinator displacement occurs, reducing plant fitness. However, there has been little consideration to the potential impacts of *Vespula* wasps on New Zealand's pollination networks. This research aimed to evaluate the role of *Vespula* wasps within 2 natural pollination networks around the Auckland region. Flowering plants visited by *Vespula* wasps were identified and facial hairiness and body pollen loads were determined to assess the potential of *Vespula* wasps as pollinators. *Vespula* wasps collected nectar from 22 plant species 14 of which were native species. *Vespula* were most prevalent on *Metrosideros excelsa* (pohutukawa) and interference competition was observed between *Vespula* and other floral visitors. This research suggests that individual *Vespula* wasps may be poor pollinators, although high visitation rates may partly compensate for this.

