

Supplemental material

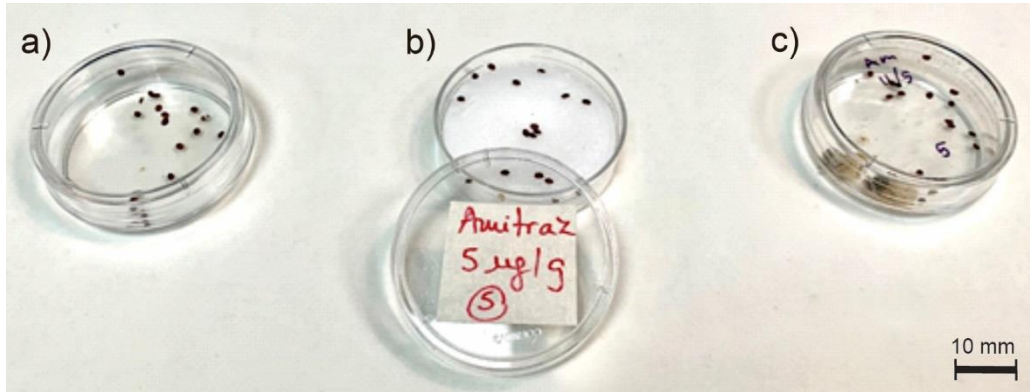


Figure S1. Experimental setup testing the effects of pesticide concentration on *Varroa* survival. a) 20 mites in a petri dish awaiting treatment, b) mites transferred to petri dish containing the treatment for an hour and c) mites in a new petri dish following exposure to the treatment with bee pupae for 48 hours, followed by a survival assessment. Photo credit: Phil Lester.

Supp. Table 1. Ten individual *Varroa destructor* mites from throughout New Zealand were sequenced in this study. We examined the samples for mutations in nucleotides 1710-1712 (amino acid position 925) of the coding region of the voltage-gated sodium channel (Na) gene (GenBank accession number KC152655) as determined in González-Cabrera et al. (2016). All our sequences presented the wild type allele.

Sample ID	Location	Sanger sequences using the Vd_L925V_F primer (nucleotides 1710-1712 are highlighted in red, and the Vd_L925_R primer binding region is highlighted in green).
1	Hamilton (Matangi, Waikato)	ACGATAGGAGCTCTGGGTAACCTGACCTTGTGTTGGGAATTATCA TCTT
2	Tamahere (Waikato)	ACGATAGGAGCTCTGGGTAACCTGACCTTGTGTTGGGAATTATCA TCTT
3	Horotiu (Waikato)	ACGATAGGAGCTCTGGGTAACCTGACCTTGTGTTGGGAATTATCA TCTT
4	Enderly (Waikato)	ACGATAGGAGCTCTGGGTAACCTGACCTTGTGTTGGGAATTATCA TCTT
5	Ōtaki (Kapiti)	ACGATAGGAGCTCTGGGTAACCTGACCTTGTGTTGGGAATTATCA TCTT
6	Kelburn (Wellington)	ACGATAGGAGCTCTGGGTAACCTGACCTTGTGTTGGGAATTATCA TCTT
7	Vogeltown (Wellington)	ACGATAGGAGCTCTGGGTAACCTGACCTTGTGTTGGGAATTATCA TCTT
8	Ashburton (Canterbury)	ACGATAGGAGCTCTGGGTAACCTGACCTTGTGTTGGGAATTATCA TCTT
9	Ashburton (Canterbury)	ACGATAGGAGCTCTGGGTAACCTGACCTTGTGTTGGGAATTATCA TCTT
10	Ashburton (Canterbury)	ACGATAGGAGCTCTGGGTAACCTGACCTTGTGTTGGGAATTATCA TCTT