Supplementary Material

Title
Neonicotinoid Clothianidin reduces honey bee immune response and contributes to *Varroa* mite proliferation

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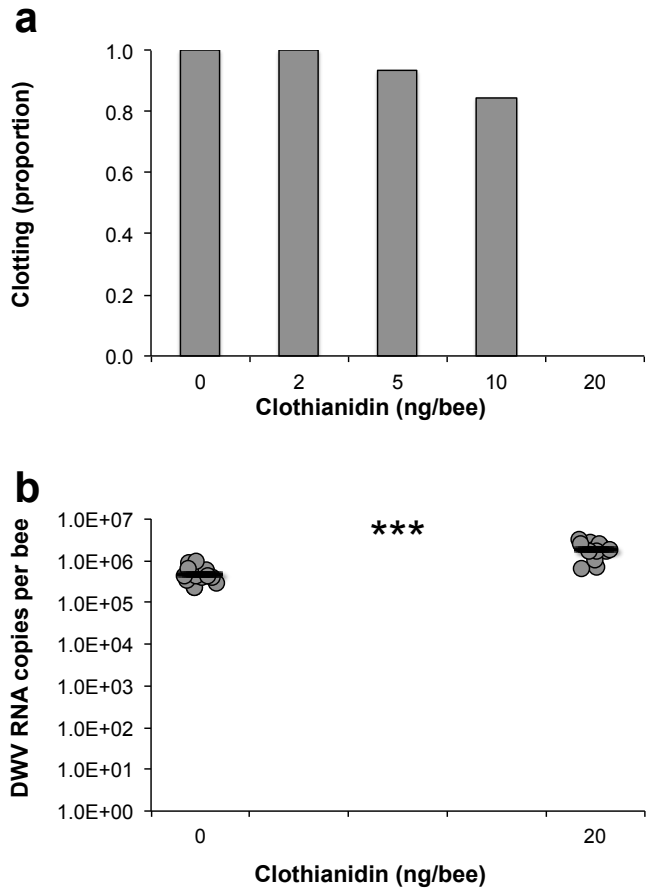
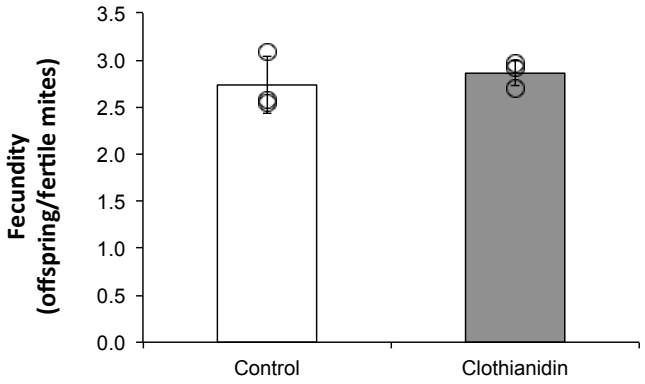
Supplementary figures



Supplementary Figure 1. **Effect of Clothianidin treatment on clotting and DWV infection level in adult bees. a** Clotting (Spearman's rho=-0.975, n=5, $P<0.05$). **b** DWVinfection level (Mann-Whitney U test: $n_1=15$, $n_2=15$, U=4, $P<0.001$). Three replicates, of five honey bees each, were considered for each experimental condition; the horizontal bars in the scatter-jittered plot represent the sample average.



Supplementary Figure 2. **Fecundity (offspring per fertile female) of *Varroa* mites feeding on pupae treated or not with Clothianidin.** The experiment was run in triplicate, for a total of 78 (n=25+17+36 biologically independent mites) and 68 (n=23+14+31 biologically independent mites) individuals for Clothianidin treated and untreated controls, respectively; the offspring per fertile female in each replicate along with the average fecundity and relative standard deviation are reported.

Supplementary tables

Supplementary Table 1. Primers used for qRT-PCR analysis of DWV and immune genes.

Transcript	**Sequence**
DWV	F: GCGCTTAGTGGAGGAAATGAA R: GCACCTACGCGATGTAAATCTG
Dorsal 1A	F: ACAGGCAGAAGCTGAGAAGC R: TTGCCATCGGATACAAGGAT
Amel\102	F: CAACTCCAGAATTGGAAATAGCA R: TTTGCAATAGGAAAAGCAGTTG
β-actin	F: GATTTGTATGCCAACACTGTCCTT R: TTGCATTCTATCTGCGATTCCA
rps5	F: AATTATTTGGTCGCTGGAATTG R: TAACGTCCAGCAGAATGTGGTA