

Supplementary Information File

Parasite-insecticide interactions: a case study of *Nosema ceranae* and fipronil synergy on honeybee

Julie Aufauvre^{1,2}, David G. Biron^{1,2}, Cyril Vidau^{1,2}, Régis Fontbonne^{1,2}, Mathieu Roudel^{1,2}, Marie Diogon^{1,2}, Bernard Viguès^{1,2}, Luc P. Belzunces³, Frédéric Delbac^{1,2} & Nicolas Blot^{1,2*}

¹Clermont Université, Université Blaise Pascal, Laboratoire "Microorganismes : Génome et Environnement", BP 10448, 63000 Clermont-Ferrand, France, ²CNRS, UMR 6023, LMGE, 63177 Aubière, France, ³INRA, UMR 406 Abeilles & Environnement, Laboratoire de Toxicologie Environnementale, Site Agroparc, Avignon, France.

Supplementary Table S1. Pairwise comparisons evaluating the susceptibility of honeybees to *Nosema ceranae* (Nc) and Fipronil (F) treatments applied alone or in combination. The given p-values are results of “cumulative survival proportions” pairwise comparisons using a Kaplan-Meier test. All differences are significant at $p \leq 0.05$.

a Exposure day 0 Nc+F
Exposure day 7 -

Variables	p-value
Nc+F vs. Control	<u>0.00000</u>
Nc+F vs. F	<u>0.00000</u>
Nc+F vs. Nc	<u>0.00000</u>

b Exposure day 0 F
Exposure day 7 Nc

Variables	p-value
Nc+F vs. Control	<u>0.00000</u>
Nc+F vs. F	<u>0.00001</u>
Nc+F vs. Nc	<u>0.00000</u>

c Exposure day 0 Nc
Exposure day 7 F

Variables	p-value
Nc+F vs. Control	<u>0.00000</u>
Nc+F vs. F	<u>0.00000</u>
Nc+F vs. Nc	<u>0.00000</u>

d Exposure day 0 -
Exposure day 7 Nc+F

Variables	p-value
Nc+F vs. Control	<u>0.00000</u>
Nc+F vs. F	<u>0.00000</u>
Nc+F vs. Nc	<u>0.00000</u>