

**Table S1.** Pairwise comparisons for logit-lines of single inoculations of fungal entomopathogens and granulovirus based on tests whether slopes and intercepts are different or not, using the likelihood ratio test. .

Pairwise comparison	Pathogen effect			Concentration effect			Pathogen x Concentration effect		
	devianc	df	adj. <i>P</i> *	devianc	df	adj. <i>P</i> *	devianc	df	adj. <i>P</i> *
	e			e			e		<i>P</i> *
Bb vs. Ma	52.92	2, 48	<b>&lt; 0.001</b>	79.86	1, 47	<b>&lt; 0.001</b>	2.93	1, 46	0.087
Bb vs. DisaGV	60.487	2, 48	<b>&lt; 0.001</b>	57.36	1, 47	<b>&lt; 0.001</b>	0.128	1, 46	0.72
Ma vs. DisaGV	27.70	2, 48	<b>&lt; 0.001</b>	88.95	1, 47	<b>&lt; 0.001</b>	1.93	1, 46	0.16

\**P*-values adjusted for three pairwise comparisons with Bonferroni. Significant *P*-value is highlighted in bold.

Ma = *Metarhizium anisopliae*

Bb = *Beauveria bassiana*

DisaGV = *Diatraea saccharalis* granulovirus

**Table S2.** Pairwise comparisons for single entomopathogen inoculations in contrast with their mixed (combined) applications based on test hypothesis of parallelism or equality, using the likelihood ratio test.

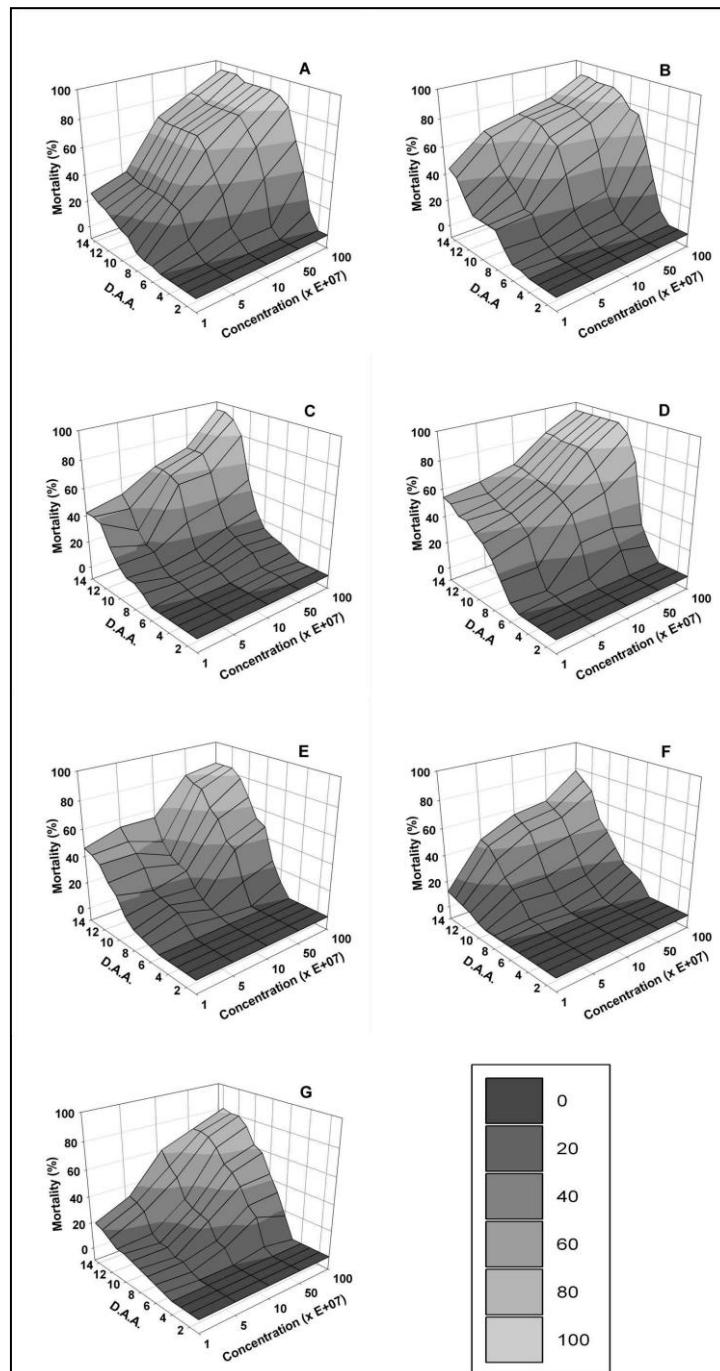
Pairwise comparison	Pathogen × Concentration					
	effect (parallelism test)			Pathogen effect (equality test)		
	deviance	df	adj. <i>P</i> *	deviance	df	adj. <i>P</i> *
Bb vs. “Bb + Ma”	0.005	1, 47	1.00	0.003	2, 48	1.00
Bb vs. “Bb + DisaGV ”	0.751	1, 47	0.833	9.20	2, 48	<b>&lt; .0001</b>
Bb vs. “Bb + Ma + DisaGV ”	1.083	1, 47	0.393	5.54	2, 48	<b>&lt; .0001</b>
Ma vs. “Ma + Bb”	1.927	1, 47	<b>0.014</b>	3.57	2, 48	<b>&lt; .0001</b>
Ma vs. “Ma + DisaGV ”	3.042	1, 47	<b>&lt; .0001</b>	1.823	2, 48	<b>0.021</b>
Ma vs. “Ma + Bb + DisaGV ”	0.122	1, 47	1.00	0.76	2, 48	0.824
DisaGV vs. “DisaGV + Bb”	0.445	1, 47	0.997	5.05	2, 48	<b>&lt; .0001</b>
DisaGV vs. “DisaGV + Ma”	0.343	1, 47	1.00	0.175	2, 48	1.00
DisaGV vs. “DisaGV + Bb + Ma”	0.77	1, 47	0.812	2.27	2, 48	<b>0.003</b>

\**P*-values adjusted for nine pairwise comparisons with Bonferroni. Pathogen applied alone (single inoculation), to which all other mixed treatments (inoculations) are compared according to the likelihood ratio test at  $P < 0.05$  (significant *P*-value is highlighted in bold).

Ma = *Metarhizium anisopliae*

Bb = *Beauveria bassiana*

DisaGV = *Diatraea saccharalis* granulovirus



**Figure S1.** Three dimension plots describing the temporal progression of sugarcane borer larval mortality as function of the inoculum concentration when exposed to single or a mixture of two or all three pathogens. Right legend represents a gradient of mortality on a gray scale. D.A.A. = days after application. A) *M. anisopliae* alone, B) *B. bassiana*

alone, C) DisaGV alone, D) *M. anisopliae* + *B. bassiana*, E) *M. anisopliae* + DisaGV, F) *B. bassiana* + DisaGV, G) *M. anisopliae* + *B. bassiana* + DisaGV.