

**Table S1.** Generalized linear mixed models (GLMM) showing the full model evaluated for each behavior observed in *Aphidius colemani* (Ac) individuals exposed and unexposed to LC20 of lambda-cyhalothrin (Ac condition: AcC) and faced with susceptible and kdr-resistant *M. persicae* genotypes (MpG), exposed and unexposed to their respective LC20 of lambda-cyhalothrin (Zero 5 EC) (Mp condition: MpC). For each level, the Chi-square statistical test ( $\chi^2$ ), the degrees of freedom (df), and the *p*-value are represented.

Mobility								
	Walking in		Walking out		Resting		$\chi^2$ (df)	<i>p</i>
	$\chi^2$ (df)	<i>p</i>	$\chi^2$ (df)	<i>p</i>	$\chi^2$ (df)	<i>p</i>		
Ac Condition (AcC)	0.01 (1)	0.934	1.92 (1)	0.165	0.08 (1)	0.778	--	--
Mp Genotype (MpG)	2.73 (1)	0.098	7.49 (1)	0.01	1.88 (1)	0.171	--	--
Mp Condition (MpC)	2063.23 (2)	<0.0001	1435.9 (2)	<0.0001	16.52 (2)	<0.0001	--	--
AcC x MpG	0.08 (1)	0.765	0.54 (1)	0.462	2.40 (1)	0.122	--	--
AcC x MpC	0.54 (2)	0.763	1.33 (2)	0.514	2.15 (2)	0.341	--	--
MpG x MpC	0.17 (1)	0.683	0.40 (1)	0.528	1.93 (1)	0.164	--	--
AcC x MpG x MpC	0.00 (1)	0.975	0.01 (1)	0.911	0.05 (1)	0.812	--	--
Antennal movements and grooming								
	Antennal contact		Antennal examination		Antennal grooming		Ovipositor grooming	
	$\chi^2$ (df)	<i>p</i>	$\chi^2$ (df)	<i>p</i>	$\chi^2$ (df)	<i>p</i>	$\chi^2$ (df)	<i>p</i>
Ac Condition (AcC)	0.55 (1)	0.456	2.87 (1)	0.090	17.74 (1)	<0.0001	0.33 (1)	0.563
Mp Genotype (MpG)	1.02 (1)	0.312	0.15 (1)	0.694	5.48 (1)	0.019	15.13 (1)	<0.0001
Mp Condition (MpC)	587.57 (2)	<0.0001	146.18 (2)	<0.0001	1454.44 (2)	<0.0001	600.08 (2)	<0.0001
AcC x MpG	3.95 (1)	0.047	0.03 (1)	0.870	0.02 (1)	0.888	4.29 (1)	0.083
AcC x MpC	6.32 (2)	0.042	1.68 (2)	0.431	0.10 (2)	0.951	3.00 (2)	0.223
MpG x MpC	1.78 (1)	0.181	1.72 (1)	0.188	2.27 (1)	0.131	0.70 (1)	0.401
AcC x MpG x MpC	0.23 (1)	0.631	0.69 (1)	0.403	0.80 (1)	0.368	0.81 (1)	0.366
Oviposition behavior								
	Sting-attempt		Sting		Sting-attempt out		Sting out	
	$\chi^2$ (df)	<i>p</i>	$\chi^2$ (df)	<i>p</i>	$\chi^2$ (df)	<i>p</i>	$\chi^2$ (df)	<i>p</i>
Ac Condition (AcC)	1.27 (1)	0.258	2.65 (1)	0.103	5.88 (1)	0.015	4.12 (1)	0.042
Mp Genotype (MpG)	5.94 (1)	0.015	11.18 (1)	<0.0001	0.04 (1)	0.851	0.12 (1)	0.719
Mp Condition (MpC)	78.31 (2)	<0.0001	66.31 (2)	<0.0001	56.79 (2)	<0.0001	47.50 (2)	<0.0001
AcC x MpG	0.00 (1)	0.988	0.04 (1)	0.833	0.14 (1)	0.704	1.15 (1)	0.282
AcC x MpC	0.21 (2)	0.899	0.21 (2)	0.900	4.41 (2)	0.110	8.68 (2)	0.013
MpG x MpC	0.00 (1)	0.969	1.84 (1)	0.174	3.70 (1)	0.054	0.00 (1)	0.995
AcC x MpG x MpC	0.01 (1)	0.912	0.01 (1)	0.917	0.28 (1)	0.595	0.06 (1)	0.941