

# Supplementary Materials: Inhibition of Larval Development of Marine Copepods *Acartia tonsa* by Neonocotinoids

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**Table S1.** Linearity ranges, limits of detection (LOD)s, limits of quantification (LOQs) and  $R^2$ , for the studied neonicotinoids.

Compound	Linearity range (ng mL <sup>-1</sup> )	LOD (pg mL <sup>-1</sup> )	LOQ (pg mL <sup>-1</sup> )	$R^2$
ACE	0.008–1000	2	8	0.9997
IMI	0.022–1100	6	22	0.9991
CLO	0.049–600	15	49	0.9857
TCLO	0.005–1050	2	5	0.9935
TMX	0.061–1200	18	61	0.9965

**Table S2.** Summary of the larval mortality (ELS-m) observed in the tested treatments. Data are reported as mean  $\pm$  standard error. Actual concentrations are reported in  $\mu\text{g L}^{-1}$ .

	Culture	Concentration	ELS-m	One-way ANOVA
ACE	AT17/20	Control	0.26 $\pm$ 0.03	$F_{4,28} = 1.81, p = 0.156$
		0.02	0.22 $\pm$ 0.05	
		0.21	0.31 $\pm$ 0.04	
		2.30	0.39 $\pm$ 0.06	
		21.4	0.25 $\pm$ 0.05	
CLO	AT19/20	Control	0.20 $\pm$ 0.01	$F_{4,29} = 2.42, p = 0.072$
		0.02	0.11 $\pm$ 0.01	
		0.08	0.26 $\pm$ 0.01	
		1.32	0.17 $\pm$ 0.01	
		12.4	0.27 $\pm$ 0.01	
IMI	AT14/19	Control	0.13 $\pm$ 0.04	$F_{4,31} = 0.97, p = 0.439$
		0.02	0.28 $\pm$ 0.13	
		0.14	0.18 $\pm$ 0.04	
		1.01	0.25 $\pm$ 0.08	
		10.1	0.13 $\pm$ 0.06	
THI	AT18/20	Control	0.26 $\pm$ 0.06	$F_{4,28} = 1.48, p = 0.239$
		0.03	0.45 $\pm$ 0.10	
		0.14	0.19 $\pm$ 0.03	
		1.13	0.17 $\pm$ 0.06	
		11.0	0.26 $\pm$ 0.09	
TMX	AT18/20	Control	0.17 $\pm$ 0.07	$F_{4,29} = 2.57, p = 0.059$
		0.01	0.32 $\pm$ 0.04	
		0.16	0.33 $\pm$ 0.06	
		1.01	0.29 $\pm$ 0.05	
		11.0	0.26 $\pm$ 0.02	

**Table S3.** Summary of the larval development ratio (LDR) observed in the tested treatments. Actual concentrations are reported in  $\mu\text{g L}^{-1}$ . Data are reported as mean  $\pm$  standard error. Significant differences ( $p < 0.05$ ) as compared with control are highlighted in bold.

	Culture	Concentration	LDR	One-way ANOVA	Dunnet's <i>post-hoc</i> test
ACE	AT17/20	Control	$0.36 \pm 0.02$	$F_{4,28} = 31.53, p < 0.001$	-
		0.02	$0.25 \pm 0.01$		$p = 0.094$
		0.21	$0.28 \pm 0.01$		$p = 0.271$
		2.30	<b><math>0.08 \pm 0.01</math></b>		<b><math>p &lt; 0.001</math></b>
		21.4	<b><math>0.02 \pm 0.01</math></b>		<b><math>p &lt; 0.001</math></b>
CLO	AT19/20	Control	$0.48 \pm 0.03$	$F_{4,29} = 22.15, p < 0.001$	-
		0.02	$0.43 \pm 0.05$		$p = 0.358$
		0.08	$0.38 \pm 0.08$		$p = 0.144$
		1.32	<b><math>0.27 \pm 0.05</math></b>		<b><math>p &lt; 0.001</math></b>
		12.4	<b><math>0.03 \pm 0.01</math></b>		<b><math>p &lt; 0.001</math></b>
IMI	AT14/19	Control	$0.64 \pm 0.01$	$F_{4,31} = 29.20, p < 0.001$	-
		0.02	$0.61 \pm 0.02$		$p = 0.485$
		0.14	<b><math>0.53 \pm 0.02</math></b>		<b><math>p = 0.008</math></b>
		1.01	<b><math>0.53 \pm 0.04</math></b>		<b><math>p = 0.017</math></b>
		10.1	<b><math>0.27 \pm 0.05</math></b>		<b><math>p &lt; 0.001</math></b>
THI	AT18/20	Control	$0.49 \pm 0.04$	$F_{4,28} = 13.72, p < 0.001$	-
		0.03	$0.46 \pm 0.02$		$p = 0.632$
		0.14	$0.40 \pm 0.03$		$p = 0.167$
		1.13	<b><math>0.34 \pm 0.06</math></b>		<b><math>p = 0.023</math></b>
		11.0	<b><math>0.03 \pm 0.01</math></b>		<b><math>p &lt; 0.001</math></b>
TMX	AT18/20	Control	$0.42 \pm 0.06$	$F_{4,27} = 8.44, p < 0.001$	-
		0.01	$0.33 \pm 0.03$		$p = 0.322$
		0.16	$0.34 \pm 0.04$		$p = 0.331$
		1.01	<b><math>0.22 \pm 0.07</math></b>		<b><math>p = 0.005</math></b>
		11.0	<b><math>0.09 \pm 0.03</math></b>		<b><math>p &lt; 0.001</math></b>