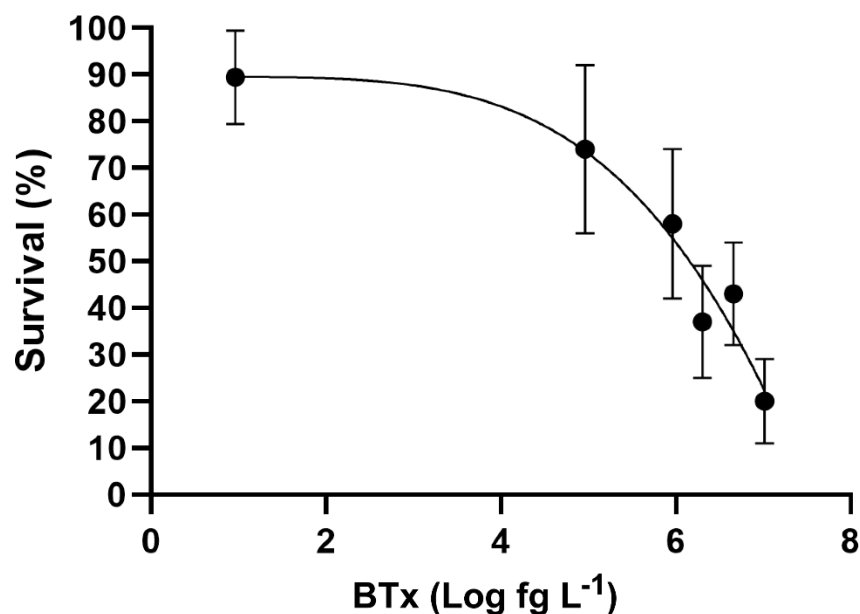


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# The Effects of the Harmful Algal Bloom Species *Karenia brevis* on Survival of Red Porgy (*Pagrus pagrus*) Larvae

Richard Wayne Litaker, Alex K. Bogdanoff, Donnie Ransom Hardison, William C. Holland, Andrew Ostrowski and James A. Morris



**Figure S1.** Dose-response curve created using combined data for all the 24 h experiments where red porgy larvae were exposed to concentrations of the three *K. brevis* strains which contained different internal BTx concentrations (Table S1). The average BTx concentration for each concentration of *K. brevis* cells tested were calculated and used in conjunction with their corresponding mean survival rates (SD) to estimate a BTx-based EC<sub>50</sub>. That value was ~17.8 pg L<sup>-1</sup> in whole *K. brevis* cells. Field studies indicated about 10% of the internal BTx concentrations are released into the water column [4].

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**Table S1.** Summary data for each of the 24h and 48h experiments carried out in this study where red porgy larvae were variously exposed to three different *Karenia brevis* isolates.

Date & Strain	Larval age days post hatch (dph) & Mean cellular brevetoxin concentrations (BTxs 1-2-3)	cells L <sup>-1</sup>	Number of larvae	24-hr % survival (mean ± SD)	48-hr % survival (mean ± SD)
2011 NCMA2228	4 dph 11.0 pg cell <sup>-1</sup>	0	28	100 ± 0	100 ± 0
		15,000	28	97 ± 6	97 ± 6
		30,000	28	100 ± 0	74 ± 13
		55,000	27	100 ± 0	77 ± 13
		115,000	30	90 ± 11	55 ± 38
	6 dph 12.6 pg cell <sup>-1</sup>	0	29	100 ± 0	100 ± 0
		10,000	28	100 ± 0	83 ± 7
		100,000	30	100 ± 0	60 ± 17
		500,000	30	93 ± 12	43 ± 25
		1,000,000	30	47 ± 6	3 ± 6
	8 dph 6.7 pg cell <sup>-1</sup>	0	30	87 ± 6	-
		10,000	30	67 ± 12	
		100,000	30	67 ± 6	
		500,000	30	30 ± 10	
		1,000,000	30	3 ± 6	
	14 dph 9.9 pg cell <sup>-1</sup>	0	30	97 ± 6	-
		10,000	30	93 ± 6	
		100,000	30	80 ± 10	
		500,000	30	63 ± 29	
		1,000,000	30	17 ± 21	
	16 dph 12.3 pg cell <sup>-1</sup>	0	27	100 ± 0	93 ± 6
		10,000	30	100 ± 0	87 ± 6
		100,000	29	86 ± 12	72 ± 17
		500,000	30	67 ± 12	0 ± 0
		1,000,000	30	40 ± 17	0 ± 0
	21 dph 6.9 pg cell <sup>-1</sup>	0	24	83 ± 7	-
		10,000	24	67 ± 7	
		100,000	24	67 ± 7	
		500,000	24	51 ± 20	
		1,000,000	24	13 ± 13	
2011 SP3	13 dph 13.5 pg cell <sup>-1</sup>	0	29	93 ± 12	-
		10,000	30	37 ± 47	
		100,000	30	7 ± 6	
		500,000	29	0 ± 0	
		1,000,000	30	0 ± 0	
2012 NCMA2228	7 dph 11.4 pg cell <sup>-1</sup>	0	30	73 ± 21	-
		10,000	30	77 ± 6	
		100,000	30	63 ± 12	
		250,000	29	24 ± 21	
		500,000	30	0 ± 0	
	11 dph 12.1 pg cell <sup>-1</sup>	0	30	97 ± 6	-
		10,000	30	90 ± 10	

		100,000	30	$30 \pm 20$	
		250,000	29	$48 \pm 3$	
		500,000	30	$0 \pm 0$	
	26 dph 9.2 pg cell <sup>-1</sup>	0	30	$97 \pm 6$	
		10,000	30	$83 \pm 12$	
		100,000	30	$63 \pm 47$	
		250,000	30	$50 \pm 0$	
		500,000	30	$0 \pm 0$	
2012 SP3	11 dph 15.4 pg cell <sup>-1</sup>	0	30	$73 \pm 25$	
		10,000	30	$60 \pm 26$	
		100,000	30	$20 \pm 20$	
		250,000	30	$0 \pm 0$	
		500,000	30	$0 \pm 0$	
2012 SP1	18 dph trace	0	30	$90 \pm 10$	
		10,000	30	$60 \pm 40$	
		100,000	30	$40 \pm 17$	
		250,000	30	$50 \pm 30$	
		500,000	30	$87 \pm 6$	
	21 dph trace	0	30	$83 \pm 21$	
		10,000	30	$53 \pm 45$	
		100,000	30	$77 \pm 32$	
		250,000	30	$47 \pm 15$	
		500,000	30	$63 \pm 15$	