

Disease ecology of *Hematodinium perezii* in a high salinity estuary: investigating seasonal trends in environmental detection

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Table S1. Infection status by month. This table displays the number of crabs in each infection status category by month. A: 2014 data. B: 2015 data. Infection status based on parasite cells/mL host hemolymph (or gram tissue) as defined by Shields & Squyars (2000). Shading is used to highlight potential disease progression throughout the season.

A Infection Status by Month 2014								
	April	May	June	July	August	September	October	Total
No Infections	26	19	41	23	24	44	10	187
Light	3	3	9	5	6	4	0	30
Moderate	1	0	1	2	6	1	0	11
Heavy	0	0	0	0	4	0	0	4
Total	30	22	51	30	40	49	10	232
B Infection Status by Month 2015								
	April	May	June	July	August	September	October	Total
No Infections	12	23	53	19	11	19	16	153
Light	26	6	27	23	14	14	6	116
Moderate	1	0	5	2	4	1	3	16
Heavy	0	1	0	5	4	2	0	12
Total	39	30	85	49	33	36	25	297

Table S2. ANOVA values p values for ANOVAs on environmental variables. ANOVAs were run to look at the variation in environmental variables by year. All variables, except for pH, were non-normal according to Shapiro tests. According to Levene's test, only temperature and turbidity had variances that were different between years (shaded boxes). For these two variables, ANOVA p-values were checked against Kruskal-Wallis p-values (**shown in bold**) which are displayed in the table for the purpose of comparison. P values are denoted as significant * at $p < 0.05$, ** at $p < 0.01$, *** at $p < 0.001$, and **** at $p < 0.0001$. The mean values for variables that were found to be significantly different by ANOVA are shown in the table as well, with 95% confidence intervals for both 2014 and 2015.

Factor	By Year	2014 Mean (+/- 95% confidence interval)	2015 Mean (+/- 95% confidence interval)
Chlorophyll <i>a</i>	F = 15.91 df = 1, 322 ****p < 0.0001	3.77 µg/L (+/- 0.415)	5.09 µg/L (+/- 0.51)
Dissolved Oxygen	F = 9.19 df = 1, 322 ** p = 0.0018	6.62 mg/L (+/- 0.31)	7.21 mg/L (+/- 0.21)
pH	F = 247 df = 1, 322 **** p < 0.0001	7.66 (+/- 0.03)	7.94 (+/- 0.02)
Salinity	F = 0.024 df = 1, 322 p = 0.88	Not Significant	Not Significant
Temperature	F = 0.21 df = 1, 322 p = 0.65 p = 0.77	Not Significant	Not Significant
Turbidity	F = 0.129 df = 1, 322 p = 0.72 p = 0.7393	Not Significant	Not Significant

LITERATURE CITED

Shields JD, Squyars CM (2000) Mortality and hematology of blue crabs, *Callinectes sapidus*, experimentally infected with the parasitic dinoflagellate *Hematodinium perezii*. Fish Bull 98:139–152