

Table 4. Mean ($\pm$ SD) of survival and mortality, mean ($\pm$ SE) of the mineral contents of the abdominal muscle and the organoleptic attribute rating for the Northern shrimp *Pandalus borealis* in relation to elevated temperature, low pH and hypoxia. Treatment symbols correspond to 2C: 2 °C, pH 7.75, O₂ sat. 100%; 2A: 2 °C, pH 7.4, O₂ sat. 100%; 2CH: 2 °C, pH 7.75, O₂ sat. 35 %; 6C: 6 °C, pH 7.75, O₂ sat. 100%; 6A: 6 °C, pH 7.4, O₂ sat. 100%; 10C: 10 °C, pH 7.75, O₂ sat. 100%; 10A: 10 °C, pH 7.4, O₂ sat. 100%; 10AH: 10 °C, pH 7.4, O₂ sat. 35 %. Different letters above mean survival values represent significant differences between treatments. Low case letters and capital letters above mean mineral content values represent significant differences between treatments in design A and B, respectively. Organoleptic attributes were scored on a hedonic scale from 1 to 9, with 9 being the highest score.

	Number of individuals per treatment	2C	2A	2CH	6C	6A	10C	10A	10AH
Survival (%)	130	93.27 $\pm$ 1.20 ^a	89.16 $\pm$ 2.07 ^{ab}	90.77 $\pm$ 2.18 ^{ab}	84.62 $\pm$ 1.83 ^b	86.01 $\pm$ 6.73 ^b	85.28 $\pm$ 0.93 ^b	67.85 $\pm$ 3.64 ^c	36.92 $\pm$ 4.35 ^d
Mortality (%)		6.73 $\pm$ 1.20 ^a	10.84 $\pm$ 2.07 ^{ab}	9.23 $\pm$ 2.18 ^{ab}	15.38 $\pm$ 1.83 ^b	13.99 $\pm$ 6.73 ^b	14.72 $\pm$ 0.93 ^b	32.15 $\pm$ 3.64 ^c	63.08 $\pm$ 4.35 ^d
[Ca ²⁺]	10	32.41 $\pm$ 2.17 ^{ab}	31.26 $\pm$ 1.45 ^{ab}	30.71 $\pm$ 1.68	28.91 $\pm$ 2.62	30.12 $\pm$ 1.84 ^b	33.11 $\pm$ 1.24 ^b	40.80 $\pm$ 5.24 ^a	33.91 $\pm$ 3.08 ^a
[Cu ²⁺]	10	0.44 $\pm$ 0.05 ^a	0.49 $\pm$ 0.03 ^a	0.40 $\pm$ 0.02	0.46 $\pm$ 0.04 ^b	0.30 $\pm$ 0.03 ^b	0.45 $\pm$ 0.02 ^a	0.53 $\pm$ 0.04 ^a	0.39 $\pm$ 0.03
[Fe ²⁺]	10	0.049 $\pm$ 0.002 ^A	0.050 $\pm$ 0.003	0.052 $\pm$ 0.004 ^A	0.064 $\pm$ 0.012	0.047 $\pm$ 0.003	0.074 $\pm$ 0.018	0.067 $\pm$ 0.004 ^B	0.063 $\pm$ 0.005 ^B
[Mg ²⁺]	10	55.52 $\pm$ 0.86 ^{aA}	56.11 $\pm$ 0.77 ^a	57.17 $\pm$ 1.43 ^A	55.87 $\pm$ 1.08 ^a	58.70 $\pm$ 2.33 ^a	63.13 $\pm$ 0.96 ^b	63.98 $\pm$ 1.08 ^{bB}	59.01 $\pm$ 1.79 ^B
[Mn ²⁺]	10	0.0083 $\pm$ 0.0005	0.0085 $\pm$ 0.0005	0.0095 $\pm$ 0.0005	0.0092 $\pm$ 0.0009	0.0084 $\pm$ 0.0005	0.0097 $\pm$ 0.0006	0.0093 $\pm$ 0.0004	0.0088 $\pm$ 0.0009
[Sr ²⁺]	10	0.15 $\pm$ 0.01 ^a	0.15 $\pm$ 0.01 ^a	0.14 $\pm$ 0.01	0.14 $\pm$ 0.02 ^a	0.15 $\pm$ 0.01 ^a	0.15 $\pm$ 0.01 ^b	0.22 $\pm$ 0.04 ^b	0.16 $\pm$ 0.02
[Zn ²⁺]	10	0.77 $\pm$ 0.02 ^a	0.75 $\pm$ 0.01 ^a	0.75 $\pm$ 0.03	0.77 $\pm$ 0.02 ^a	0.73 $\pm$ 0.03 ^a	0.78 $\pm$ 0.02 ^b	0.85 $\pm$ 0.02 ^b	0.74 $\pm$ 0.02
[K ⁺]	10	371.81 $\pm$ 7.96 ^{aA}	357.91 $\pm$ 6.62 ^a	361.61 $\pm$ 10.32 ^A	364.85 $\pm$ 6.72 ^a	361.26 $\pm$ 8.43 ^a	404.29 $\pm$ 6.60 ^b	414.30 $\pm$ 7.61 ^{bB}	401.02 $\pm$ 10.01 ^B
Odor rating	42	7.58 $\pm$ 0.42		7.67 $\pm$ 0.29			7.50 $\pm$ 0.51	7.67 $\pm$ 0.40	
Texture rating	42	7.75 $\pm$ 0.27		7.92 $\pm$ 0.24			7.42 $\pm$ 0.55	7.33 $\pm$ 0.54	
Taste rating	42	6.33 $\pm$ 0.65		7.17 $\pm$ 0.59			6.83 $\pm$ 0.77	6.33 $\pm$ 0.54	
Appearance rating	42	7.33 $\pm$ 0.73		7.67 $\pm$ 0.41			7.0 $\pm$ 0.61	7.58 $\pm$ 0.70	