

Supplementary Material

Meeting the Salinity Requirements of the Bivalve Mollusc *Crassostrea gigas* in the Depuration Process and Posterior Shelf-Life Period to Improve Food Safety and Product Quality

João A. Silvestre ¹, Sílvia F. S. Pires ², Vitória Pereira ², Miguel Colaço ¹, Ana P. L. Costa ², Amadeu M. V. M. Soares ², Domitília Matias ³, Filipa Bettencourt ³, Sergio Fernández-Boo ⁴, Rui J. M. Rocha ^{2,*} and Andreia C. M. Rodrigues ²

¹ Department of Biology, University of Aveiro, 3810-193 Aveiro, Portugal; joaosilvestre@ua.pt (J.A.S.); mbfc@ua.pt (M.C.)

² CESAM (Centre for Marine and Environmental Studies), Department of Biology, University of Aveiro, 3810-193 Aveiro, Portugal; silviapires1@ua.pt (S.F.S.P.); vitoria.pereira@ua.pt (V.P.); anaplcosta@ua.pt (A.P.L.C.); asoares@ua.pt (A.M.V.M.S.); rodrigues.a@ua.pt (A.C.M.R.)

³ IPMA, Instituto Português do Mar e da Atmosfera, Olhão, Portugal; dmatias@ipma.pt (D.M.); fbettencourt@ipma.pt (F.B.)

⁴ Centro Interdisciplinar de Investigação Marinha e Ambiental (CIIMAR), Universidade do Porto, Avenida General Norton de Matos, S/N, 4450-208 Matosinhos, Portugal; sboo@ciimar.up.pt

* Correspondence: ruimirandarocha@ua.pt

Supplementary Material

Table S1. Parametric *t*-test or non-parametric Mann-Whitney (U) values for the measured biochemical biomarkers of *C. gigas* of the t(0) and each salinity of the t(24h).

	Analysis	<i>t</i>	<i>df</i>	U	P
Lipids	t(0) vs. 25	0.967	8	—	0.362
	t(0) vs. 30	0.103	8	—	0.920
	t(0) vs. 35	0.920	8	—	0.384
	t(0) vs. 40	0.987	8	—	0.352
Sugars	t(0) vs. 25	1.52	8	—	0.167
	t(0) vs. 30	0.131	8	—	0.899
	t(0) vs. 35	2.035	8	—	0.076
	t(0) vs. 40	3.113	8	—	0.014
Proteins	t(0) vs. 25	—	—	12	>0.999
	t(0) vs. 30	—	—	9	0.548
	t(0) vs. 35	—	—	5	0.151
	t(0) vs. 40	—	—	11	0.841
Ea	t(0) vs. 25	1.184	8	—	0.27
	t(0) vs. 30	0.401	8	—	0.699
	t(0) vs. 35	1.865	8	—	0.099
	t(0) vs. 40	2.285	8	—	0.052
Ec	t(0) vs. 25	—	—	3	0.056
	t(0) vs. 30	—	—	4	0.095
	t(0) vs. 35	—	—	4	0.095
	t(0) vs. 40	—	—	11	0.841
CEA	t(0) vs. 25	2.519	8	—	0.036
	t(0) vs. 30	3.169	8	—	0.013
	t(0) vs. 35	3.449	8	—	0.009
	t(0) vs. 40	2.463	8	—	0.039
CAT	t(0) vs. 25	0.659	8	—	0.528

tGSH	t(0) vs. 30	0.6698	8	—	0.522
	t(0) vs. 35	2.182	8	—	0.061
	t(0) vs. 40	3.525	8	—	0.008
	t(0) vs. 25	—	—	8	0.421
	t(0) vs. 30	—	—	5	0.151
	t(0) vs. 35	—	—	2	0.032
	t(0) vs. 40	—	—	3	0.056
GST	t(0) vs. 25	—	—	10	0.69
	t(0) vs. 30	—	—	5	0.151
	t(0) vs. 35	—	—	3	0.056
	t(0) vs. 40	—	—	3	0.056
LPO	t(0) vs. 25	3.544	8	—	0.008
	t(0) vs. 30	1.619	8	—	0.144
	t(0) vs. 35	0.06341	8	—	0.951
	t(0) vs. 40	0.9845	8	—	0.354

Table S2. Two-way ANOVA parameters showing total variation (%), F and P values for the biochemical biomarkers measured in *C. gigas* after 24-hour depuration and 6days of shelf-life, with time and salinity as factors.

	Source of variation	% of total variation	F (DFn, DFd)	P
Lipids	Interaction	4.324	F (3, 32) = 0.518	0.673
	Time	0.005	F (1, 32) = 0.002	0.966
	Salinity	6.562	F (3, 32) = 0.786	0.511
Sugars	Interaction	19.13	F (3, 32) = 2.671	0.064
	Time	0.12	F (1, 32) = 0.050	0.824
	Salinity	4.383	F (3, 32) = 0.612	0.612
Proteins	Interaction	15.33	F (3, 32) = 2.216	0.105
	Time	3.303	F (1, 32) = 1.432	0.240
	Salinity	7.556	F (3, 32) = 1.092	0.367
Ea	Interaction	7.315	F (3, 32) = 0.888	0.458
	Time	0.127	F (1, 32) = 0.046	0.831
	Salinity	4.638	F (3, 32) = 0.563	0.644
Ec	Interaction	20.69	F (3, 32) = 2.857	0.052
	Time	0.578	F (1, 32) = 0.240	0.628
	Salinity	1.497	F (3, 32) = 0.207	0.891
CEA	Interaction	16.87	F (3, 32) = 2.414	0.085
	Time	1.668	F (1, 32) = 0.716	0.404
	Salinity	6.921	F (3, 32) = 0.990	0.410
CAT	Interaction	32.78	F (3, 32) = 5.300	0.004
	Time	0.033	F (1, 32) = 0.016	0.901
	Salinity	1.203	F (3, 32) = 0.195	0.899
tGSH	Interaction	9.419	F (3, 32) = 1.570	0.216
	Time	24.27	F (1, 32) = 12.14	0.001
	Salinity	2.32	F (3, 32) = 0.387	0.763
GST	Interaction	24.48	F (3, 32) = 3.980	0.016
	Time	1.192	F (1, 32) = 0.581	0.451
	Salinity	8.705	F (3, 32) = 1.415	0.256
LPO	Interaction	29.27	F (3, 32) = 7.831	<.001
	Time	2.933	F (1, 32) = 2.354	0.135
	Salinity	27.93	F (3, 32) = 7.471	<.001