

Seasonal Variation of Biochemical Composition and Non-Volatile Taste Active Compounds in Pearl Oyster *Pinctada fucata martensii* from Two Selective Strains

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Table S1. Significance levels of Two-way ANOVAs between strain and sampling season for pearl oyster biological characteristics, biochemical composition and non-volatile taste active compounds.

Items	Two-Way ANOVA (P-value)		
	Strain	Season	Interaction
Biological characteristics			
Shell height (mm)	0.000	0.007	0.351
Shell width index	0.000	0.000	0.573
Wet body weight (g)	0.003	0.016	0.898
Ratio of soft tissues (%)	0.001	0.000	0.021
Proximate compositions			
Moisture	0.983	0.006	0.009
Ash	0.052	0.034	0.426
Crude protein	0.273	0.045	0.357
Crude lipid	0.022	0.002	0.088
Glycogen	0.272	0.001	0.041
Amino acids			
Lysine*	0.305	0.354	0.014
Valine*	0.110	0.694	0.030
Phenylalanine*	0.523	0.352	0.622
Methionine*	0.536	0.314	0.603
Leucine*	0.067	0.551	0.024
Isoleucine*	0.158	0.536	0.101
Threonine*	0.831	0.246	0.880
Tryptophan*	0.383	0.353	0.381
EAA	0.975	0.265	0.557
Glutamic acid	0.844	0.162	0.535
Glycine	0.469	0.227	0.037
Aspartic acid	0.825	0.162	0.390
Alanine	0.174	0.539	0.039
Tyrosine	0.525	0.352	0.616
Serine	0.101	0.189	0.027
Histidine	0.393	0.362	0.411
Arginine	0.212	0.867	0.067
Proline	0.814	0.258	0.850

Cysteine	0.438	0.379	0.425
NEAA	0.828	0.214	0.781
TAA	0.874	0.229	0.705
Fatty acids			
C12:0	0.001	0.000	0.002
C14:0	0.162	0.078	0.022
C15:0	0.081	0.103	0.024
C16:0	0.035	0.026	0.027
C17:0	0.093	0.081	0.089
C18:0	0.072	0.771	0.031
C20:0	0.964	0.066	0.093
ΣSFA	0.096	0.262	0.035
C16:1n-9	0.480	0.040	0.028
C18:1n-9	0.296	0.343	0.055
C20:1n-9	0.574	0.029	0.864
ΣMUFA	0.563	0.599	0.041
C18:2n-6	0.285	0.016	0.119
C20:2n-6	0.185	0.340	0.047
C20:2n-7	0.662	0.805	0.334
C18:3n-3	0.115	0.008	0.064
C18:3n-6	0.146	0.008	0.009
C20:4n6 ARA	0.034	0.649	0.038
C20:5n-3 EPA	0.079	0.001	0.263
C22:5n3	0.068	0.003	0.144
C22:6n3 DHA	0.073	0.002	0.140
ΣPUFA	0.063	0.005	0.096
Σn-3	0.066	0.001	0.147
Σn-6	0.035	0.737	0.034
FAAs			
Aspartic acid	0.011	0.008	0.599
Glutamic acid	0.000	0.000	0.226
Umami FAA	0.000	0.000	0.641
Serine	0.001	0.841	0.000
Glycine	0.002	0.011	0.295
Threonine	0.006	0.018	0.287
Alanine	0.001	0.066	0.012
Arginine	0.000	0.002	0.460
Valine	0.002	0.014	0.027
Lysine	0.000	0.000	0.000
Proline	0.004	0.000	0.008
Sweet FAA	0.001	0.003	0.656
Histidine	0.035	0.005	0.035
Phenylalanine	0.029	0.074	0.225
Isoleucine	0.001	0.002	0.014
Leucine	0.001	0.001	0.019
Methionine	0.022	0.007	0.075
Tryptophan	0.313	0.004	0.596
Bitter FAA	0.001	0.000	0.016
Taurine	0.053	0.046	0.007
Total FAA	0.001	0.000	0.001
Nucleotides			

CMP	0.684	0.112	0.406
GMP	0.376	0.012	0.035
AMP	0.032	0.017	0.093
Total nucleotides	0.028	0.012	0.071
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Organic acids and betaine			
Succinic acid	0.493	0.107	0.887
Malic acid	0.051	0.002	0.113
Citric acid	0.255	0.209	0.210
Betaine	0.004	0.000	0.289
