

Supplementary Material

1 Supplementary tables

Table S1

	FR_01		FR_02		FR_03		FR_04		FR_05		FR_06		FR_07		FR_08		FR_09		FR_10		FR_SI_01		FR_SI_02		FR_SI_03		FR_SI_04	
Crustacea	0	0.00%	0.777	11.15%	0.473	3.58%	1.353	47.51%	2.330	17.64%	5.358	39.06%	4.440	37.11%	0.700	4.98%	0.585	2.25%	0.450	1.53%	1.008	92.31%	2.403	64.17%	1.488	16.33%	6.226	84.53%
Decapoda	0	0.00%	0.772	11.07%	0.473	3.58%	1.353	47.51%	1.582	11.98%	4.696	34.23%	4.401	36.78%	0	0.00%	0.170	0.65%	0.286	0.98%	1.008	92.31%	2.403	64.17%	1.469	16.12%	6.147	83.46%
Amphipoda	0	0.00%	0.005	0.07%	0	0.00%	0	0.00%	0.482	3.65%	0.662	4.83%	0.017	0.14%	0.672	4.78%	0.371	1.43%	0.085	0.29%	0	0.00%	0	0.00%	0.019	0.21%	0.048	0.65%
Tanaidacea	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0.121	0.92%	0	0.00%	0	0.00%	0.013	0.09%	0.016	0.06%	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
Isopoda	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0.145	1.10%	0	0.00%	0.022	0.18%	0.015	0.11%	0.028	0.11%	0.079	0.27%	0	0.00%	0	0.00%	0	0.00%	0.031	0.42%
Mollusca	3.043	33.74%	2.461	35.30%	6.078	45.94%	0.973	34.16%	0.298	2.26%	1.055	7.69%	0.415	3.47%	0.777	5.53%	0.425	1.64%	0.996	3.40%	0.012	1.10%	0.965	25.77%	1.014	11.13%	0.211	2.86%
Bivalvia	0.085	0.94%	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0.031	0.23%	0	0.00%	0.559	3.98%	0.245	0.94%	0	0.00%	0	0.00%	0	0.00%	0.112	1.23%	0	0.00%
Polyplocophora	0	0.00%	0	0.00%	0	0.00%	0.051	1.79%	0	0.00%	0	0.00%	0.013	0.11%	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0.031	0.34%	0	0.00%
Gasteropoda	2.958	32.80%	2.461	35.30%	6.078	45.94%	0.922	32.37%	0.298	2.26%	1.024	7.46%	0.402	3.36%	0.218	1.55%	0.180	0.69%	0.996	3.40%	0.012	1.10%	0.965	25.77%	0.871	9.56%	0.211	2.86%
Echinodermata	2.201	24.40%	0.892	12.80%	1.798	13.59%	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0.576	7.82%
Teleostei	0.868	9.62%	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
Polychaeta	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0.131	0.95%	0.033	0.28%	0.583	4.15%	0.021	0.08%	0	0.00%	0	0.00%	0	0.00%	0.008	0.09%	0.071	0.96%
Photophilic algae	1.938	21.49%	0	0.00%	1.707	12.90%	0	0.00%	10.365	78.49%	4.124	30.06%	1.334	11.15%	8.560	60.90%	15.899	61.20%	27.665	94.34%	0	0.00%	0	0.00%	6.445	70.74%	0.190	2.58%
<i>Posidonia oceanica</i>	0.000	0.00%	0.082	1.18%	1.073	8.11%	0.041	1.44%	0	0.00%	0	0.00%	0.009	0.08%	0.041	0.29%	0.015	0.06%	0.000	0.00%	0	0.00%	0	0.00%	0	0.00%	0.053	0.72%
<i>Caulerpa sp.</i>	0.045	0.50%	0.013	0.19%	0.168	1.27%	0.000	0.00%	0.213	1.61%	0	0.00%	0.071	0.59%	0	0.00%	0	0.00%	0.215	0.73%	0	0.00%	0	0.00%	0.025	0.27%	0.038	0.52%
Inorganic particles	0.924	10.25%	2.511	36.02%	1.933	14.61%	0.481	16.89%	0	0.00%	0.644	4.69%	5.664	47.33%	3.314	23.58%	9.035	34.78%	0	0.00%	0.072	6.59%	0.377	10.07%	0.131	1.44%	0	0.00%
Plant debris	0	0.00%	0.235	3.37%	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
Animal debris	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%	2.407	17.55%	0	0.00%	0.081	0.58%	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
Total animal content	6.112	67.77%	4.130	59.25%	8.349	63.11%	2.326	81.67%	2.628	19.90%	8.951	65.25%	4.888	40.85%	2.141	15.23%	1.031	3.97%	1.446	4.93%	1.020	93.41%	3.368	89.93%	2.510	27.55%	7.084	96.18%
Total plant content	1.983	21.99%	0.330	4.73%	2.948	22.28%	0.041	1.44%	10.578	80.10%	4.124	30.06%	1.414	11.82%	8.601	61.19%	15.914	61.25%	27.880	95.07%	0.000	0.00%	0	0.00%	6.470	71.01%	0.281	3.82%
Total gut content	9.019	100.00%	6.971	100.00%	13.230	100.00%	2.848	100.00%	13.206	100.00%	13.719	100.00%	11.966	100.00%	14.056	100.00%	25.980	100.00%	29.326	100.00%	1.092	100.00%	3.745	100.00%	9.111	100.00%	7.365	100.00%

Table S2

Factor Values

Factor	size_300gr
Levels	> 300 gr
	< 300 gr

Factor Groups

Sample	size_300gr
FR_01-FR_10	> 300 gr
FR_SI_01-FR_SI_04	< 300 gr

Global Test

Sample statistic (Global R)	0.25
Significance level of sample statistic	2.90%
Number of permutations	999 (Random sample from 1001)
Number of permuted statistics greater than or equal to Global R	28

Table S3

Parameters

Resemblance: D1 Euclidean distance

Cut off for low contributions: 90.00%

Factor Groups

Sample	Sex
FR_01	F
FR_02	F
FR_04	F
FR_05	F
FR_06	F
FR_07	F
FR_09	F
FR_03	M
FR_08	M
FR_10	M

Group F

Average squared distance = 15.18

Species	Av.Value	Av.Sq.Dist	Sq.Dist/SD	Contrib%	Cum.%
LPO_muscle	-0.315	2.64E-3	0.56	0.02	0.02
GPx_liver	0.395	0.119	0.50	0.78	0.80
GSI	0.56	0.264	0.48	1.74	2.54
GST_muscle	0.236	0.584	0.54	3.85	6.38
LPO_liver	-8E-2	0.808	0.52	5.32	11.71
SOD_muscle	-0.344	0.815	0.50	5.37	17.08
CAT_liver	0.162	0.951	0.53	6.27	23.34
CS_liver	-8.65E-2	0.969	0.51	6.38	29.72
CAT_muscle	0.261	1.1	0.58	7.24	36.96
AChE_liver	-8.61E-2	1.1	0.51	7.26	44.22
HSI	3.74E-2	1.13	0.53	7.45	51.67
SOD_liver	-0.217	1.14	0.55	7.49	59.15
AChE_muscle	0.217	1.16	0.51	7.62	66.78
CS_muscle	5.86E-2	1.21	0.54	7.95	74.73
GST_liver	0.252	1.21	0.59	7.97	82.69
GPx_muscle	9.2E-2	1.28	0.59	8.45	91.15

Group M

Average squared distance = 19.30

Species	Av.Value	Av.Sq.Dist	Sq.Dist/SD	Contrib%	Cum.%
GSI	-1.31	5.05E-2	0.65	0.26	0.26
GST_liver	-0.589	0.129	0.65	0.67	0.93
CF	-0.255	0.33	0.65	1.71	2.64
CAT_muscle	-0.61	0.409	0.65	2.12	4.76
AChE_muscle	-0.507	0.479	0.65	2.48	7.24
SOD_liver	0.507	0.539	0.65	2.79	10.03
GPx_muscle	-0.215	0.551	0.65	2.86	12.89
SOD_muscle	0.803	0.672	0.65	3.48	16.37
CS_muscle	-0.137	0.84	0.65	4.35	20.72
HSI	-8.73E-2	1.09	0.65	5.65	26.38
AChE_liver	0.201	1.11	0.65	5.74	32.12
CAT_liver	-0.379	1.34	0.65	6.94	39.05
CS_liver	0.202	1.51	0.65	7.81	46.87
LPO_liver	0.187	2	0.65	10.37	57.23
GST_muscle	-0.551	2.1	0.65	10.87	68.10
GPx_liver	-0.753	2.82	0.65	14.64	82.74
LPO_muscle	0.736	3.33	0.65	17.26	100.00

Groups F & M

Average squared distance = 37.05

Variable	Group F Av.Value	Group M Av.Value	Av.Sq.Dist	Sq.Dist/SD	Contrib%	Cum.%
GSI	0.56	-1.31	3.74	2.10	10.11	10.11
LPO_muscle	-0.315	0.736	3.33	0.69	8.99	19.09
GPx_liver	0.395	-0.753	3.3	0.70	8.91	28.01
GST_muscle	0.236	-0.551	2.52	1.00	6.80	34.81
SOD_muscle	-0.344	0.803	2.46	1.11	6.65	41.46
LPO_liver	-8E-2	0.187	2.1	0.81	5.66	47.12
CAT_liver	0.162	-0.379	2	0.75	5.40	52.52
CAT_muscle	0.261	-0.61	1.97	0.84	5.32	57.84
CS_liver	-8.65E-2	0.202	1.92	0.85	5.18	63.02
SOD_liver	-0.217	0.507	1.86	0.72	5.02	68.04
AChE_muscle	0.217	-0.507	1.84	0.65	4.95	72.99
GST_liver	0.252	-0.589	1.83	0.89	4.94	77.93
AChE_liver	-8.61E-2	0.201	1.77	0.89	4.77	82.70
HSI	3.74E-2	-8.73E-2	1.71	0.83	4.62	87.32
CS_muscle	5.86E-2	-0.137	1.63	0.86	4.41	91.73

2 Captions

Table S1 Diet composition in terms of biomass (g, left) and relative percentage composition (right) of the full dataset. Preys were identified to the lowest possible taxonomic level.

Table S2 Summary of the one-way ANOSIM run on the diet composition of the full dataset. Statistically significant dietary differences exist between specimens grouped according to the 300 gr BW size factor.

Table S3 Results of the SIMPER routine run on the same Euclidean distance matrix used for the CAP analysis. The GSI variable discriminating between sex groups is in bold.