

**Table:**  $\delta^{13}\text{C}$  and  $\delta^{15}\text{N}$  values for each macroalgae species at each station

Station	species	$\delta^{13}\text{C}$	$\delta^{15}\text{N}$	Station	species	$\delta^{13}\text{C}$	$\delta^{15}\text{N}$
1	<i>Fucus vesiculosus</i>	-19,97	11,08	11	<i>Fucus serratus</i>	-17,67	7,44
1	<i>Ascophyllum nodosum</i>	-17,87	9,56	11	<i>Mastocarpus stellatus</i>	-17,89	7,23
1	<i>Polysiphonia lanosa</i>	-20,08	6,5	11	<i>Calliblepharis jubata</i>	-19,13	8,54
1	Ulve sp	-13,31	8,97	11	<i>Lomentaria articulata</i>	-33,76	9,1
2	<i>Ascophyllum nodosum</i>	-16,85	9,61	11	<i>Chondrus crispus</i>	-21,14	7,54
2	<i>Fucus serratus</i>	-21,77	8,71	11	<i>Palmaria palmata</i>	-18,2	7,95
2	<i>Polysiphonia lanosa</i>	-21,03	2,99	11	<i>Osmundea pinnatifida</i>	-15,29	8,33
2	Ulve	-18,58	6,35	11	Ulve	-17,58	9,06
3	<i>Ascophyllum nodosum</i>	-17,35	9,59	12	<i>Fucus serratus</i>	-21,12	6,87
3	<i>Fucus serratus</i>	-20,91	9,82	12	<i>Mastocarpus stellatus</i>	-17,73	8,9
3	<i>Polysiphonia lanosa</i>	-21,11	5,71	12	<i>Osmundea pinnatifida</i>	-14,64	7,43
3	Ulve	-17,15	6,07	12	<i>Dilsea carnosa</i>	-20,72	7,82
4	<i>Fucus serratus</i>	-18,41	9,86	12	<i>Lomentaria articulata</i>	-33,28	8,3
4	<i>Fucus vesiculosus</i>	-18,72	10,41	12	Ulve	-20,11	8,1
4	<i>Ascophyllum nodosum</i>	-15,24	10,89	13	<i>Fucus serratus</i>	-21,85	9,2
4	<i>Mastocarpus stellatus</i>	-15,11	10,02	13	<i>Osmundea pinnatifida</i>	-19,81	9,37
4	<i>Polysiphonia lanosa</i>	-21,65	9,71	13	Ulve	-18,95	10,2
4	Ulve	-17,86	10,29	14	<i>Fucus vesiculosus</i>	-17,89	10,31
5	<i>Ascophyllum nodosum</i>	-15,6	10,52	14	<i>Ascophyllum nodosum</i>	-14,34	8,8
5	<i>Fucus serratus</i>	-18,49	9,39	14	Ulve	-19,61	9,58
5	<i>Fucus spiralis</i>	-17,56	9,29	15	<i>Fucus serratus</i>	-22,12	8,57
5	<i>Osmundea pinnatifida</i>	-15,51	9,97	15	<i>Osmundea pinnatifida</i>	-15,25	9,83
5	<i>Chondrus crispus</i>	-19,51	8,67	15	<i>Mastocarpus stellatus</i>	-21,55	7,78
5	<i>Polysiphonia lanosa</i>	-22,18	9,2	15	Ulve	-17,06	9,37
5	Ulve	-15,09	8,86	16	<i>Fucus vesiculosus</i>	-18,11	9,58
6	<i>Fucus vesiculosus</i>	-19,05	10,24	16	<i>Mastocarpus stellatus</i>	-18,61	8,95
6	<i>Palmaria palmata</i>	-20,59	9,12	16	Ulve	-17,97	9,11
6	Ulve	-18,91	10,47	17	<i>Fucus vesiculosus</i>	-20,06	9,85
7	<i>Fucus spiralis</i>	-17,29	9,14	17	<i>Ascophyllum nodosum</i>	-16,93	8,99
7	<i>Mastocarpus stellatus</i>	-19,2	9,55	17	<i>Mastocarpus stellatus</i>	-22,9	9,54
7	<i>Polysiphonia lanosa</i>	-22,05	10,34	17	Ulve	-16,87	8,99
7	Ulve	-17,67	10,52	18	<i>Himenthalia elongata</i>	-16,72	8,5
8	<i>Fucus spiralis</i>	-20,25	9,51	18	<i>Fucus serratus</i>	-17,35	7,32
8	<i>Fucus serratus</i>	-19,67	7,73	18	<i>Gelidium sp</i>	-20,08	8,9
8	<i>Mastocarpus stellatus</i>	-21,22	9,47	18	<i>Lomentaria articulata</i>	-32,11	8,76
8	Ulve	-18,01	9,53	18	<i>Mastocarpus stellatus</i>	-15,42	9,47
9	<i>Fucus serratus</i>	-20,62	8,32	18	Ulve	-17,56	8,26
9	<i>Mastocarpus stellatus</i>	-22,25	9,05	19	<i>Bifurcaria bifurcata</i>	-16,88	7,45
9	<i>Polysiphonia lanosa</i>	-23,23	10,01	19	<i>Fucus vesiculosus</i>	-17,3	7,65
9	Ulve	-19,22	10,42	19	<i>Mastocarpus stellatus</i>	-18,66	7,59
10	<i>Fucus serratus</i>	-16,62	7,22				
10	<i>Mastocarpus stellatus</i>	-19,52	7,82				
10	Ulve	-17,89	11,08				

**Table:**  $\delta^{13}\text{C}$  and  $\delta^{15}\text{N}$  values in oyster muscles with size (mm) of each individual.

Station	$\delta^{13}\text{C}$	$\delta^{15}\text{N}$	Size (mm)	Station	$\delta^{13}\text{C}$	$\delta^{15}\text{N}$	Size (mm)
1	-18,7	11,05	92	11	-16,99	9,24	91
1	-16,99	12,15	66	11	-17,17	10,86	81
1	-16,79	12,45	78	11	-17,21	10,18	73
1	-17,92	11,53	82	11	-17,43	10,52	65
1	-17,28	12,68	94	11	-17,01	10,05	77
2	-17,51	11,89	90	12	-16,71	11,7	86
2	-17,73	11,56	92	12	-17,1	10,09	68
2	-17,92	12,62	69	12	-16,98	10,43	70
2	-17,17	12,56	73	12	-17,23	10,1	71
2	-17,68	11,28	73	12	-16,8	11,43	87
3	-17,95	11,59	72	13	-17,17	10,97	80
3	-18,04	11,88	94	13	-17,29	10,18	89
3	-17,65	12,14	84	13	-17,04	9,57	63
3	-17,23	12,62	91	13	-17,22	9,63	95
3	-18,12	12,08	83	13	-17,21	10,29	67
4	-17,45	11,6	100	14	-17,05	10,17	62
4	-17,82	11,29	84	14	-16,95	10,14	76
4	-17,53	11,66	86	14	-17,67	9,68	79
4	-17,27	11,17	77	14	-17,2	10,38	82
5	-18,58	10,6	68	14	-16,71	10,2	74
5	-17,71	11,05	76	15	-17,56	9,35	60
5	-18,89	10,87	77	15	-17,26	9,86	53
5	-17,03	12,24	76	15	-17,08	10,19	71
5	-18,49	10,94	94	15	-17,79	9,38	56
6	-18,29	10,84	90	15	-17,37	9,51	67
6	-18,66	10,19	95	16	-17,09	10,45	86
6	-17,89	11,63	89	16	-17,11	10,37	61
6	-18,05	11,41	71	16	-17,21	10,15	85
7	-16,93	12,03	90	16	-17,54	9,73	67
7	-18,06	10,97	80	16	-17,51	9,28	66
7	-17,8	11,5	71	17	-17,45	10,04	70
7	-17,49	11,66	68	17	-17,88	9,54	68
8	-17,5	11,54	76	17	-17,63	10,3	70
8	-17,43	10,96	92	17	-17,33	10,21	66
8	-17,49	12,07	92	17	-17,52	9,62	56
8	-17,33	11,83	106	18	-17,81	9,57	51
9	-17,67	11,26	92	18	-17,43	10,6	59
9	-17,61	11,41	94	18	-17,97	10,54	47
9	-17,52	11,59	78	18	-17,36	10,85	60
9	-17,5	11,95	63	19	-17,62	9,72	76
10	-17,12	10,99	78	19	-17,83	9,65	85
10	-17,67	10,53	76	19	-17,56	9,61	66
10	-17,01	11,21	70	19	-17,52	9,74	59
10	-17,47	10,65	85	19	-17,06	10,11	86
10	-17,3	10,61	71				

**Table:** means  $\delta^{13}\text{C}$ ,  $\delta^{15}\text{N}$  and C/N values ( $\pm\text{SD}$ ) of oysters muscles, SPOM, biofilm and macroalgae at each stations (19). n = number of samples at each stations.

	Distance to station 1	Oysters muscles			SPOM			Biofilm			Macroalgae						
station	(km)	n	$\delta^{13}\text{C}$	$\delta^{15}\text{N}$	C/N	n	$\delta^{13}\text{C}$	$\delta^{15}\text{N}$	C/N	n	$\delta^{13}\text{C}$	$\delta^{15}\text{N}$	C/N	n	$\delta^{13}\text{C}$	$\delta^{15}\text{N}$	C/N
<b>1</b>	0	5	-17.5 $\pm$ 0.8	12.0 $\pm$ 0.7	3.34 $\pm$ 0.05	0				1		10.0	5.8	4	-17.8 $\pm$ 3.2	9.0 $\pm$ 1.9	9.8 $\pm$ 1.9
<b>2</b>	1.6	5	-17.6 $\pm$ 0.3	12.0 $\pm$ 0.6	3.28 $\pm$ 0.04	3	-22.8 $\pm$ 0.7	7.2 $\pm$ 0.3	7.9 $\pm$ 0.7	1	-24.8	7.9	6.4	4	-19.6 $\pm$ 2.3	6.9 $\pm$ 3.0	9.5 $\pm$ 2.4
<b>3</b>	2.6	5	-17.8 $\pm$ 0.4	12.1 $\pm$ 0.4	3.29 $\pm$ 0.05	3	-23.2 $\pm$ 0.0	7.2 $\pm$ 0.1	7.8 $\pm$ 0.0	1	-19.0	9.6	6.0	4	-19.1 $\pm$ 2.2	7.8 $\pm$ 2.2	8.7 $\pm$ 1.4
<b>4</b>	5	4	-17.5 $\pm$ 0.2	11.4 $\pm$ 0.2	3.27 $\pm$ 0.06	2	-23.2 and -23.3	6.6 and 7.1	7.6 and 8.5	1	-17.0	9.3	5.5	6	-17.8 $\pm$ 2.4	10.2 $\pm$ 0.4	9.9 $\pm$ 1.8
<b>5</b>	6.8	5	-18.1 $\pm$ 0.8	11.1 $\pm$ 0.6	3.28 $\pm$ 0.06	2	-14.8 and -15.2	7.3 and 7.3	11.1 and 10.7	1	-18.9	8.7	6.0	7	-17.7 $\pm$ 2.6	9.4 $\pm$ 0.6	8.5 $\pm$ 2.2
<b>6</b>	8	4	-18.2 $\pm$ 0.3	11.0 $\pm$ 0.6	3.26 $\pm$ 0.04	2	-21.5 and -21.7	7.6 and 7.9	6.3 and 6.4	1	-20.8	8.1	6.0	3	-19.5 $\pm$ 0.9	9.9 $\pm$ 0.7	10.6 $\pm$ 3.5
<b>7</b>	9.4	4	-17.6 $\pm$ 0.5	11.5 $\pm$ 0.4	3.24 $\pm$ 0.02	3	-21.7 $\pm$ 0.1	7.1 $\pm$ 0.0	7.0 $\pm$ 0.1	1	-20.3	8.5	5.7	4	-19.1 $\pm$ 2.2	9.9 $\pm$ 0.7	9.9 $\pm$ 2.0
<b>8</b>	10.8	4	-17.4 $\pm$ 0.1	11.6 $\pm$ 0.5	3.28 $\pm$ 0.02	3	-20.5 $\pm$ 0.2	8.3 $\pm$ 0.2	6.0 $\pm$ 0.4	1	-20.1	8.8	5.4	4	-19.8 $\pm$ 1.3	9.1 $\pm$ 0.9	10.5 $\pm$ 2.9
<b>9</b>	12.6	4	-17.6 $\pm$ 0.1	11.6 $\pm$ 0.3	3.24 $\pm$ 0.06	3	-21.0 $\pm$ 0.1	7.4 $\pm$ 0.1	6.8 $\pm$ 0.1	1	-20.0	7.7	5.8	4	-21.3 $\pm$ 1.8	9.5 $\pm$ 0.9	9.1 $\pm$ 0.6
<b>10</b>	14.4	5	-17.3 $\pm$ 0.3	10.8 $\pm$ 0.3	3.26 $\pm$ 0.03	3	-21.6 $\pm$ 0.2	7.4 $\pm$ 0.4	6.7 $\pm$ 0.2	1	-21.0	7.6	5.9	3	-18.0 $\pm$ 1.5	8.7 $\pm$ 2.1	8.5 $\pm$ 2.5
<b>11</b>	16.4	5	-17.2 $\pm$ 0.2	10.2 $\pm$ 0.6	3.23 $\pm$ 0.02	2	-17.5 and -19.1	6.7 and 6.7	8.0 and 7.5	1	-18.5	5.7	7.3	8	-20.1 $\pm$ 5.8	8.1 $\pm$ 0.7	7.4 $\pm$ 1.5
<b>12</b>	18.2	5	-17.0 $\pm$ 0.2	10.8 $\pm$ 0.8	3.29 $\pm$ 0.02	3	-19.4 $\pm$ 0.7	7.0 $\pm$ 0.1	7.1 $\pm$ 0.2	1	-16.2	6.3	7.7	6	-21.3 $\pm$ 6.4	7.9 $\pm$ 0.7	7.8 $\pm$ 1.6
<b>13</b>	19.3	5	-17.2 $\pm$ 0.1	10.1 $\pm$ 0.6	3.30 $\pm$ 0.02	2	-21.5 and -21.1	6.8 and 6.6	7.3 and 7.3	1	-19.2	7.0	5.7	3	-20.2 $\pm$ 1.5	9.6 $\pm$ 0.5	9.5 $\pm$ 2.8
<b>14</b>	20.9	5	-17.1 $\pm$ 0.4	10.1 $\pm$ 0.3	3.26 $\pm$ 0.10	3	-22.4 $\pm$ 0.1	7.8 $\pm$ 0.2	5.7 $\pm$ 0.0	1	-21.0	6.9	5.8	3	-17.3 $\pm$ 2.7	9.6 $\pm$ 0.8	13.9 $\pm$ 6.1
<b>15</b>	23.4	5	-17.4 $\pm$ 0.3	9.7 $\pm$ 0.4	3.26 $\pm$ 0.03	2	-21.9 and -22.1	6.9 and 7.1	5.9 and 6.1	1	-21.3	7.1	5.8	4	-19.0 $\pm$ 3.4	8.9 $\pm$ 0.9	9.7 $\pm$ 2.0
<b>16</b>	28.3	5	-17.3 $\pm$ 0.2	10.0 $\pm$ 0.5	3.26 $\pm$ 0.03	3	-21.4 $\pm$ 0.1	7.3 $\pm$ 0.2	6.3 $\pm$ 0.2	1	-20.7	5.5	6.4	3	-18.2 $\pm$ 0.3	9.2 $\pm$ 0.3	10.7 $\pm$ 3.5
<b>17</b>	30.7	5	-17.6 $\pm$ 0.2	9.9 $\pm$ 0.3	3.28 $\pm$ 0.02	3	-21.3 $\pm$ 0.1	6.7 $\pm$ 0.3	6.2 $\pm$ 0.2	1	-21.5	5.6	6.3	4	-19.2 $\pm$ 2.9	9.3 $\pm$ 0.4	11.1 $\pm$ 3.8
<b>18</b>	34.8	4	-17.6 $\pm$ 0.3	10.4 $\pm$ 0.6	3.30 $\pm$ 0.02	3	-22.2 $\pm$ 0.1	7.5 $\pm$ 0.5	6.9 $\pm$ 0.2	1	-20.9	6.2	6.3	6	-19.9 $\pm$ 6.2	8.5 $\pm$ 0.7	8.9 $\pm$ 2.2
<b>19</b>	39.2	5	-17.5 $\pm$ 0.3	9.8 $\pm$ 0.2	3.25 $\pm$ 0.02	1	-22.4	6.6	7.1	1	-20.2	5.2	6.2	3	-17.6 $\pm$ 0.9	7.6 $\pm$ 0.1	14.4 $\pm$ 5.3