

Supplementary material Table 2. Mean values of *Posidonia oceanica* biological variables and environmental parameters measured and recorded along a 3-36 m depth transect (June 23, 2015 - July 13, 2015) in the pristine meadow of the Revellata Bay, in the Gulf of Calvi (Corsica, France). Standard deviation (sd) and number of replicates (nb) are given.

Posidonia oceanica biological variables

Depth (m)	DMSP ($\mu\text{mol.g}_{\text{fw}}^{-1}$)			DMSO ($\mu\text{mol.g}_{\text{fw}}^{-1}$)			DMSP:DMSO ratio ($\mu\text{mol}:\mu\text{mol}$)		
	mean	sd	nb	mean	sd	nb	mean	sd	nb
3	93	25	3	4.0	1.3	3	21.8	1.4	3
10	107	26	12	3.8	1.1	12	30.2	9.8	12
15	96	-	2	3.4	-	2	28.3	-	2
20	71	21	3	1.8	0.2	3	38.2	5.5	3
25	105	9	3	3.4	1.2	3	35.1	17.2	3
29	143	26	3	4.1	0.6	3	38.5	12.4	3
36	123	29	3	4.4	0.7	3	28.6	5.7	3

Posidonia oceanica biological variables (continued)

Depth (m)	ΦPSII			Shoot foliar surface (cm^2)			Third leaf foliar surface (cm^2)		
	mean	sd	nb	mean	sd	nb	mean	sd	nb
3	0.61	0.14	6	264	49	6	65	19	6
10	0.60	0.09	24	343	57	24	86	14	24
15	0.62	0.04	6	-	-	-	-	-	-
20	0.73	0.01	6	322	27	6	63	7	6
25	0.69	0.02	6	-	-	-	-	-	-
29	0.67	0.02	6	151	28	6	40	9	6
36	0.70	0.05	6	147	33	6	38	8	6

Environmental parameters

Depth (m)	PAR (DIVING-PAM) ($\mu\text{mol photons.m}^{-2}.\text{s}^{-1}$)			Lux (cd.sr.m^{-2})			Temperature ($^{\circ}\text{C}$)		
	mean	sd	nb	mean	sd	nb	mean	sd	nb
3	33	11	6	36521	4915	23	24.7	1.3	23
10	43	11	24	14196	941	23	24.1	1.4	23
15	58	16	6	-	-	-	-	-	-
20	49	8	6	9712	637	23	20.4	2.2	23
25	36	7	6	-	-	-	-	-	-
29	80	18	6	4419	336	23	17.7	1.9	23
36	43	11	6	2734	248	23	16.5	0.8	23