

Corrigendum and supplementary data to “Chemical contamination along the Mediterranean French coast using *Posidonia oceanica* (L.) Delile above-ground tissues: a multiple trace element study” [Ecological Indicators 18 (2012) 269–277]

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The authors regret that the location of the study sites 7 to 10 and the scale of latitudes in Fig. 1 in the original paper were incorrect (as reported in part in Richir et al., 2014). The correct version of Fig. 1 is given below. To be consistent with the succession of study sites in Table 1 and Figs. 2 and 3, original site numbers have been retained. The authors would like to apologize for any inconvenience caused.

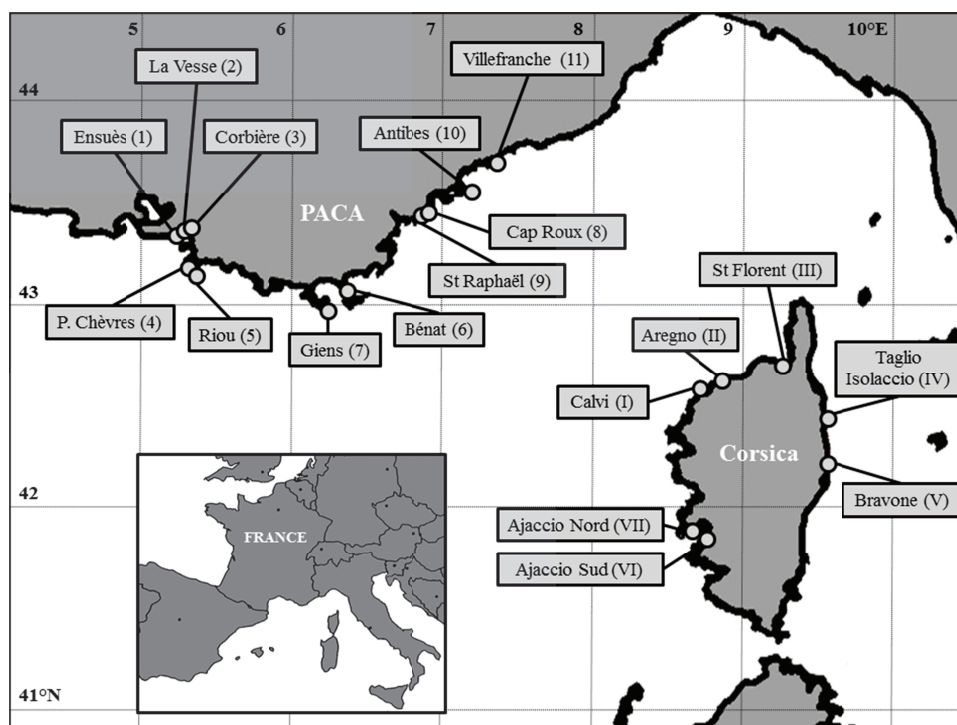


Fig. 1. Map showing the location of the study sites along the Provence-Alpes-Côte d’Azur (PACA) and Corsican coasts.

The geographic coordinates of the study sites and a KML file enabling their visualization on Google maps is available from the synthesis survey of Richir et al. (2015). The authors further take advantage of this corrigendum to publish supplementary data sets and graphics associated with Table 1B and Figs. 2 and 3.

References

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Supplementary Material

3IL		Be	Al	V	Cr	Mn	Fe	Co	Ni	Cu	Zn
PACA											
Ensuès (1)	**	0.0083 ± 0.0031	129 ± 24	9.1 ± 4.6	0.38 ± 0.06	63.5 ± 6.0	142 ± 16	2.38 ± 0.19	32.5 ± 2.7	13.3 ± 0.6	108 ± 8
La Vesse (2)	**	0.0077 ± 0.0034	114 ± 33	8.5 ± 2.7	0.30 ± 0.05	60.9 ± 4.2	121 ± 18	2.70 ± 0.18	31.4 ± 1.2	19.8 ± 2.1	170 ± 14
Corbière (3)	**	0.0078 ± 0.0027	176 ± 21	12.0 ± 3.5	0.44 ± 0.04	59.9 ± 7.3	157 ± 13	2.30 ± 0.25	30.2 ± 1.8	17.0 ± 2.0	135 ± 13
P. Chèvres (4)	**	0.0053 ± 0.0023	55 ± 8	10.1 ± 0.7	0.29 ± 0.06	44.9 ± 3.6	74 ± 6	2.13 ± 0.28	31.8 ± 2.7	11.9 ± 1.1	93 ± 8
Riou (5)		0.0013 ± 0.0017	31 ± 8	1.3 ± 0.2	0.20 ± 0.02	44.4 ± 3.6	63 ± 5	2.55 ± 0.22	38.1 ± 4.0	11.0 ± 1.0	105 ± 9
Bénat (6)	**	0.0070 ± 0.0014	74 ± 26	1.2 ± 0.2	0.21 ± 0.01	60.7 ± 4.7	87 ± 17	2.88 ± 0.30	34.9 ± 1.6	13.0 ± 1.9	102 ± 8
Giens (7)	**	0.0070 ± 0.0015	127 ± 24	1.4 ± 0.4	0.23 ± 0.03	66.7 ± 4.5	126 ± 13	3.43 ± 0.22	33.5 ± 1.7	13.0 ± 1.6	135 ± 5
Cap Roux (8)	**	0.0082 ± 0.0035	85 ± 23	8.9 ± 2.5	0.26 ± 0.01	73.7 ± 5.3	73 ± 12	3.27 ± 0.19	34.6 ± 1.9	10.0 ± 0.7	94 ± 5
St Raphaël (9)	**	0.0063 ± 0.0022	36 ± 11	3.6 ± 1.2	0.18 ± 0.03	94.6 ± 5.8	53 ± 5	4.41 ± 0.56	47.6 ± 3.7	13.3 ± 1.9	139 ± 11
Antibes (10)	**	0.0077 ± 0.0035	90 ± 31	28.0 ± 11.1	0.27 ± 0.05	57.3 ± 10.9	93 ± 15	2.51 ± 0.20	28.6 ± 1.9	13.7 ± 1.5	71 ± 4
Villefranche (11)	**	0.0071 ± 0.0027	57 ± 11	13.6 ± 3.6	0.29 ± 0.02	72.2 ± 20.0	85 ± 6	2.06 ± 0.29	20.5 ± 1.5	23.6 ± 1.7	91 ± 14
Corsica											
Calvi (I)		0.0015 ± 0.0014	20 ± 4	9.1 ± 2.2	0.15 ± 0.01	47.9 ± 5.6	45 ± 6	1.79 ± 0.12	27.8 ± 1.7	7.2 ± 1.2	73 ± 8
Aregno (II)		0.0009 ± 0.0028	36 ± 12	0.9 ± 0.1	0.14 ± 0.02	52.0 ± 2.5	55 ± 6	2.79 ± 0.09	28.7 ± 0.8	14.6 ± 1.0	114 ± 9
St Florent (III)		0.0041 ± 0.0018	96 ± 23	3.1 ± 0.8	0.93 ± 0.24	45.0 ± 1.9	139 ± 23	2.02 ± 0.14	25.1 ± 1.0	8.7 ± 1.3	80 ± 8
T. Isolaccio (IV)	**	0.0087 ± 0.0032	122 ± 8	16.8 ± 6.5	0.50 ± 0.07	89.7 ± 13.7	134 ± 14	2.43 ± 0.25	28.6 ± 3.2	11.0 ± 0.8	107 ± 15
Bravone (V)	**	0.0093 ± 0.0027	165 ± 111	1.7 ± 0.2	0.52 ± 0.08	72.1 ± 9.5	150 ± 34	3.42 ± 0.24	27.9 ± 2.6	21.6 ± 2.3	1115 ± 320
Ajaccio S. (VI)		0.0042 ± 0.0038	55 ± 11	3.1 ± 1.4	0.20 ± 0.03	57.6 ± 3.1	66 ± 4	2.85 ± 0.17	39.8 ± 0.8	8.2 ± 0.2	102 ± 7
Ajaccio N. (VII)	**	0.0099 ± 0.0036	132 ± 44	5.6 ± 2.0	0.26 ± 0.02	58.2 ± 3.1	149 ± 31	1.75 ± 0.09	23.7 ± 1.0	7.8 ± 1.0	85 ± 10
OIL											
PACA											
Ensuès (1)	**	0.0092 ± 0.0035	128 ± 30	9.0 ± 3.6	0.37 ± 0.05	66.7 ± 2.9	145 ± 15	2.51 ± 0.16	25.3 ± 1.6	13.9 ± 0.8	120 ± 9
La Vesse (2)	**	0.0068 ± 0.0023	99 ± 16	12.5 ± 5.4	0.29 ± 0.03	65.2 ± 3.2	114 ± 7	2.76 ± 0.11	26.2 ± 1.0	20.6 ± 0.8	174 ± 11
Corbière (3)	*	0.0106 ± 0.0022	140 ± 40	11.5 ± 2.4	0.35 ± 0.06	61.4 ± 6.8	136 ± 24	2.40 ± 0.16	22.9 ± 1.3	18.5 ± 1.2	152 ± 6
P. Chèvres (4)		0.0050 ± 0.0035	62 ± 12	8.3 ± 1.3	0.27 ± 0.03	42.2 ± 2.2	80 ± 7	1.91 ± 0.11	23.2 ± 1.1	11.9 ± 0.7	91 ± 7
Riou (5)		0.0026 ± 0.0023	25 ± 8	1.2 ± 0.1	0.14 ± 0.03	39.3 ± 2.3	56 ± 4	2.11 ± 0.18	27.8 ± 2.8	10.9 ± 0.9	93 ± 7
Bénat (6)	**	0.0066 ± 0.0047	81 ± 31	1.4 ± 0.2	0.17 ± 0.02	56.2 ± 3.5	87 ± 16	2.34 ± 0.25	26.8 ± 2.9	12.5 ± 1.7	87 ± 4
Giens (7)	**	0.0066 ± 0.0024	130 ± 42	1.1 ± 0.4	0.18 ± 0.03	58.2 ± 4.7	122 ± 22	2.79 ± 0.30	27.5 ± 1.8	13.9 ± 1.3	111 ± 7
Cap Roux (8)		0.0049 ± 0.0035	88 ± 31	4.5 ± 0.9	0.15 ± 0.01	64.7 ± 5.7	64 ± 8	2.65 ± 0.15	24.4 ± 1.7	11.2 ± 1.3	86 ± 5
St Raphaël (9)		0.0051 ± 0.0019	38 ± 10	2.7 ± 0.8	0.16 ± 0.04	84.3 ± 6.2	57 ± 18	3.81 ± 0.26	38.7 ± 2.0	13.6 ± 1.1	121 ± 9
Antibes (10)		0.0033 ± 0.0019	74 ± 5	23.7 ± 8.2	0.19 ± 0.01	49.9 ± 4.4	78 ± 3	2.18 ± 0.09	21.9 ± 1.6	13.6 ± 1.0	67 ± 3
Villefranche (11)		0.0051 ± 0.0035	57 ± 14	11.2 ± 5.3	0.22 ± 0.02	55.5 ± 14.6	76 ± 7	1.59 ± 0.13	13.9 ± 1.9	22.4 ± 2.6	81 ± 2
Corsica											
Calvi (I)	**	0.0068 ± 0.0038	17 ± 6	7.2 ± 2.4	0.13 ± 0.03	44.2 ± 2.1	41 ± 2	1.59 ± 0.08	23.9 ± 1.6	7.3 ± 0.6	74 ± 8
Aregno (II)	*	0.0118 ± 0.0035	98 ± 43	0.8 ± 0.1	0.17 ± 0.06	43.8 ± 3.4	76 ± 18	2.27 ± 0.20	23.8 ± 1.6	17.4 ± 2.8	100 ± 8
St Florent (III)		0.0050 ± 0.0019	86 ± 14	2.3 ± 0.6	0.82 ± 0.15	38.0 ± 2.3	119 ± 13	1.57 ± 0.09	20.0 ± 0.8	9.1 ± 0.8	74 ± 12
T. Isolaccio (IV)	**	0.0074 ± 0.0034	102 ± 35	12.4 ± 3.4	0.37 ± 0.11	62.4 ± 1.4	115 ± 24	1.68 ± 0.07	22.5 ± 0.8	11.1 ± 0.8	82 ± 14
Bravone (V)	**	0.0065 ± 0.0022	110 ± 46	1.6 ± 0.3	0.54 ± 0.26	61.1 ± 4.7	202 ± 91	3.09 ± 0.21	24.5 ± 2.2	22.7 ± 1.5	1332 ± 333
Ajaccio S. (VI)	**	0.0073 ± 0.0034	67 ± 21	2.2 ± 0.5	0.14 ± 0.01	51.5 ± 3.4	62 ± 5	2.24 ± 0.14	26.8 ± 0.7	8.2 ± 0.5	92 ± 12
Ajaccio N. (VII)	**	0.0086 ± 0.0042	121 ± 41	9.0 ± 7.7	0.19 ± 0.04	51.2 ± 8.0	122 ± 10	1.35 ± 0.20	19.4 ± 1.4	7.1 ± 0.5	76 ± 10

Annex to Table 1B. Spatial variation of trace element concentrations in *Posidonia oceanica* 3rd intermediate leaves (3IL; n = 3-5), other intermediate leaves (OIL; n = 5), blades of adult leaves (BAL; n = 4-5) and sheaths of adult leaves (SAL; n = 3-5). Concentrations are expressed as mean ± standard deviation in µg g_{DW}⁻¹. *, **, struck-through values and nd represent concentrations < L_Q, < L_D, < L_C and not detected, respectively. The number of replicates varies from 3 to 5, depending on site and compartment.

BAL	Be	Al	V	Cr	Mn	Fe	Co	Ni	Cu	Zn
PACA										
Ensuès (1)	0.0102 ± 0.0013	91 ± 21	12.3 ± 2.1	0.36 ± 0.05	72.4 ± 2.3	121 ± 25	2.74 ± 0.15	36.5 ± 1.8	10.1 ± 0.7	101 ± 4
La Vesse (2)	0.0105 ± 0.0043	132 ± 50	15.0 ± 3.3	0.40 ± 0.10	78.9 ± 8.3	133 ± 27	3.48 ± 0.26	42.7 ± 4.2	17.4 ± 1.1	157 ± 8
Corbière (3)	0.0103 ± 0.0028	123 ± 25	20.1 ± 8.0	0.40 ± 0.07	67.4 ± 10.6	132 ± 18	2.76 ± 0.39	35.0 ± 3.6	17.1 ± 1.8	135 ± 12
P. Chèvres (4)	* 0.0088 ± 0.0018	65 ± 7	40.1 ± 7.3	0.47 ± 0.01	58.1 ± 3.6	88 ± 6	2.76 ± 0.12	37.4 ± 1.7	11.7 ± 0.6	104 ± 4
Riou (5)	* 0.0069 ± 0.0035	21 ± 6	2.6 ± 0.3	0.20 ± 0.02	50.2 ± 6.5	54 ± 7	2.89 ± 0.29	42.5 ± 1.7	9.3 ± 1.1	99 ± 9
Bénat (6)	* 0.0094 ± 0.0026	88 ± 26	2.6 ± 0.3	0.27 ± 0.05	79.0 ± 7.6	95 ± 8	3.90 ± 0.54	45.1 ± 6.3	11.2 ± 2.2	100 ± 12
Giens (7)	0.0119 ± 0.0030	154 ± 30	2.7 ± 1.0	0.31 ± 0.04	90.7 ± 5.6	137 ± 21	4.52 ± 0.41	45.9 ± 2.2	10.6 ± 1.1	143 ± 7
Cap Roux (8)	0.0139 ± 0.0017	156 ± 25	12.8 ± 2.6	0.35 ± 0.02	93.7 ± 10.4	89 ± 6	4.26 ± 0.42	46.7 ± 4.0	8.1 ± 0.7	95 ± 7
St Raphaël (9)	* 0.0091 ± 0.0022	41 ± 12	4.5 ± 1.3	0.26 ± 0.04	118.4 ± 17.3	53 ± 7	6.17 ± 0.77	66.0 ± 5.6	10.4 ± 1.6	138 ± 15
Antibes (10)	0.0114 ± 0.0019	114 ± 38	24.3 ± 8.6	0.36 ± 0.06	61.0 ± 6.9	98 ± 17	3.12 ± 0.24	38.8 ± 3.4	12.5 ± 1.3	70 ± 8
Villefranche (11)	0.0122 ± 0.0032	60 ± 7	16.4 ± 5.9	0.36 ± 0.03	65.4 ± 12.0	96 ± 5	2.86 ± 0.27	30.2 ± 3.8	22.1 ± 1.2	98 ± 3
Corsica										
Calvi (I)	* 0.0083 ± 0.0012	20 ± 4	12.8 ± 1.9	0.23 ± 0.02	63.3 ± 7.4	43 ± 2	2.71 ± 0.08	36.5 ± 1.5	5.9 ± 0.4	77 ± 5
Aregno (II)	0.0026 ± 0.0024	39 ± 12	2.2 ± 0.3	0.19 ± 0.02	73.5 ± 3.5	53 ± 4	4.37 ± 0.16	40.4 ± 1.9	13.6 ± 1.4	133 ± 9
St Florent (III)	** 0.0033 ± 0.0027	89 ± 36	3.7 ± 0.6	0.90 ± 0.22	63.1 ± 7.4	136 ± 35	2.85 ± 0.05	31.6 ± 2.8	8.1 ± 1.2	79 ± 6
T. Isolaccio (IV)	0.0111 ± 0.0028	84 ± 18	29.3 ± 9.7	0.49 ± 0.07	129.1 ± 15.8	109 ± 11	3.39 ± 0.21	38.1 ± 1.2	8.8 ± 0.9	101 ± 15
Bravone (V)	0.0124 ± 0.0015	146 ± 31	3.6 ± 0.5	0.54 ± 0.04	111.9 ± 9.9	148 ± 19	5.22 ± 0.19	40.4 ± 2.1	22.6 ± 2.6	1655 ± 338
Ajaccio S. (VI)	* 0.0060 ± 0.0020	92 ± 22	5.2 ± 1.5	0.25 ± 0.05	69.8 ± 5.1	83 ± 10	3.52 ± 0.22	42.4 ± 2.1	8.2 ± 0.4	97 ± 8
Ajaccio N. (VII)	0.0144 ± 0.0035	168 ± 61	7.3 ± 3.1	0.31 ± 0.06	72.6 ± 11.1	157 ± 26	2.11 ± 0.18	26.3 ± 1.9	6.8 ± 0.3	74 ± 4
SAL										
PACA										
Ensuès (1)	0.0080 ± 0.0002	161 ± 20	1.7 ± 0.4	0.40 ± 0.08	18.4 ± 0.6	193 ± 15	0.32 ± 0.03	16.5 ± 0.2	19.9 ± 0.3	49 ± 7
La Vesse (2)	0.0042 ± 0.0000	95 ± 5	2.2 ± 1.3	0.25 ± 0.04	18.4 ± 0.7	105 ± 5	0.30 ± 0.03	13.3 ± 0.7	27.5 ± 3.1	55 ± 4
Corbière (3)	0.0043 ± 0.0000	119 ± 33	1.1 ± 0.1	0.23 ± 0.06	14.8 ± 0.3	113 ± 20	0.25 ± 0.03	11.7 ± 0.7	22.8 ± 2.4	47 ± 1
P. Chèvres (4)	0.0042 ± 0.0000	74 ± 13	2.2 ± 0.1	0.37 ± 0.10	16.8 ± 1.9	89 ± 7	0.30 ± 0.04	14.9 ± 1.0	13.5 ± 0.5	46 ± 2
Riou (5)	0.0035 ± 0.0009	38 ± 8	0.8 ± 0.2	0.19 ± 0.01	12.5 ± 0.3	56 ± 12	0.26 ± 0.04	18.2 ± 0.4	16.4 ± 0.5	43 ± 2
Bénat (6)	0.0057 ± 0.0024	154 ± 44	0.6 ± 0.1	0.19 ± 0.07	12.2 ± 0.2	127 ± 45	0.27 ± 0.03	16.0 ± 2.7	17.6 ± 0.1	28 ± 0
Giens (7)	0.0061 ± 0.0018	211 ± 31	0.9 ± 0.2	0.25 ± 0.03	15.4 ± 1.6	197 ± 31	0.27 ± 0.03	11.2 ± 2.1	19.1 ± 3.2	30 ± 2
Cap Roux (8)	0.0059 ± 0.0017	153 ± 43	0.7 ± 0.2	0.14 ± 0.03	14.7 ± 2.1	74 ± 16	0.25 ± 0.02	10.2 ± 0.9	14.3 ± 1.4	25 ± 1
St Raphaël (9)	0.0038 ± 0.0020	70 ± 22	0.8 ± 0.2	0.19 ± 0.06	20.4 ± 4.5	64 ± 15	0.41 ± 0.09	17.5 ± 2.5	16.8 ± 2.3	35 ± 3
Antibes (10)	0.0035 ± 0.0017	98 ± 18	2.2 ± 1.2	0.20 ± 0.04	15.0 ± 2.5	100 ± 13	0.30 ± 0.04	12.3 ± 0.2	22.5 ± 2.3	34 ± 3
Villefranche (11)	0.0014 ± 0.0023	75 ± 10	1.0 ± 0.4	0.48 ± 0.50	8.2 ± 1.1	78 ± 4	0.22 ± 0.01	9.3 ± 0.3	25.6 ± 3.2	28 ± 1
Corsica										
Calvi (I)	0.0024 ± 0.0022	29 ± 7	0.5 ± 0.1	0.07 ± 0.01	8.3 ± 0.8	28 ± 5	0.27 ± 0.01	15.9 ± 3.1	8.2 ± 1.9	28 ± 4
Aregno (II)	0.0096 ± 0.0062	164 ± 96	1.1 ± 0.5	0.54 ± 0.46	9.2 ± 1.7	138 ± 103	0.24 ± 0.04	12.7 ± 2.1	17.0 ± 1.5	24 ± 3
St Florent (III)	0.0053 ± 0.0023	223 ± 10	1.1 ± 0.3	1.87 ± 0.24	10.4 ± 0.7	182 ± 19	0.26 ± 0.01	11.6 ± 1.5	14.2 ± 1.1	33 ± 4
T. Isolaccio (IV)	0.0069 ± 0.0024	277 ± 61	2.7 ± 1.3	0.98 ± 0.15	28.3 ± 4.2	315 ± 56	0.38 ± 0.08	11.3 ± 2.1	15.2 ± 2.0	30 ± 5
Bravone (V)	0.0050 ± 0.0035	219 ± 49	1.0 ± 0.2	0.95 ± 0.25	17.1 ± 2.5	251 ± 56	0.42 ± 0.05	8.8 ± 1.0	24.3 ± 3.5	357 ± 239
Ajaccio S. (VI)	0.0194 ± 0.0089	417 ± 178	2.0 ± 0.6	0.24 ± 0.06	16.0 ± 3.0	145 ± 59	0.30 ± 0.05	13.8 ± 1.0	9.7 ± 1.4	31 ± 1
Ajaccio N. (VII)	0.0122 ± 0.0002	212 ± 33	1.8 ± 1.3	0.15 ± 0.03	13.8 ± 1.3	146 ± 28	0.20 ± 0.03	11.4 ± 1.3	9.7 ± 1.9	30 ± 4

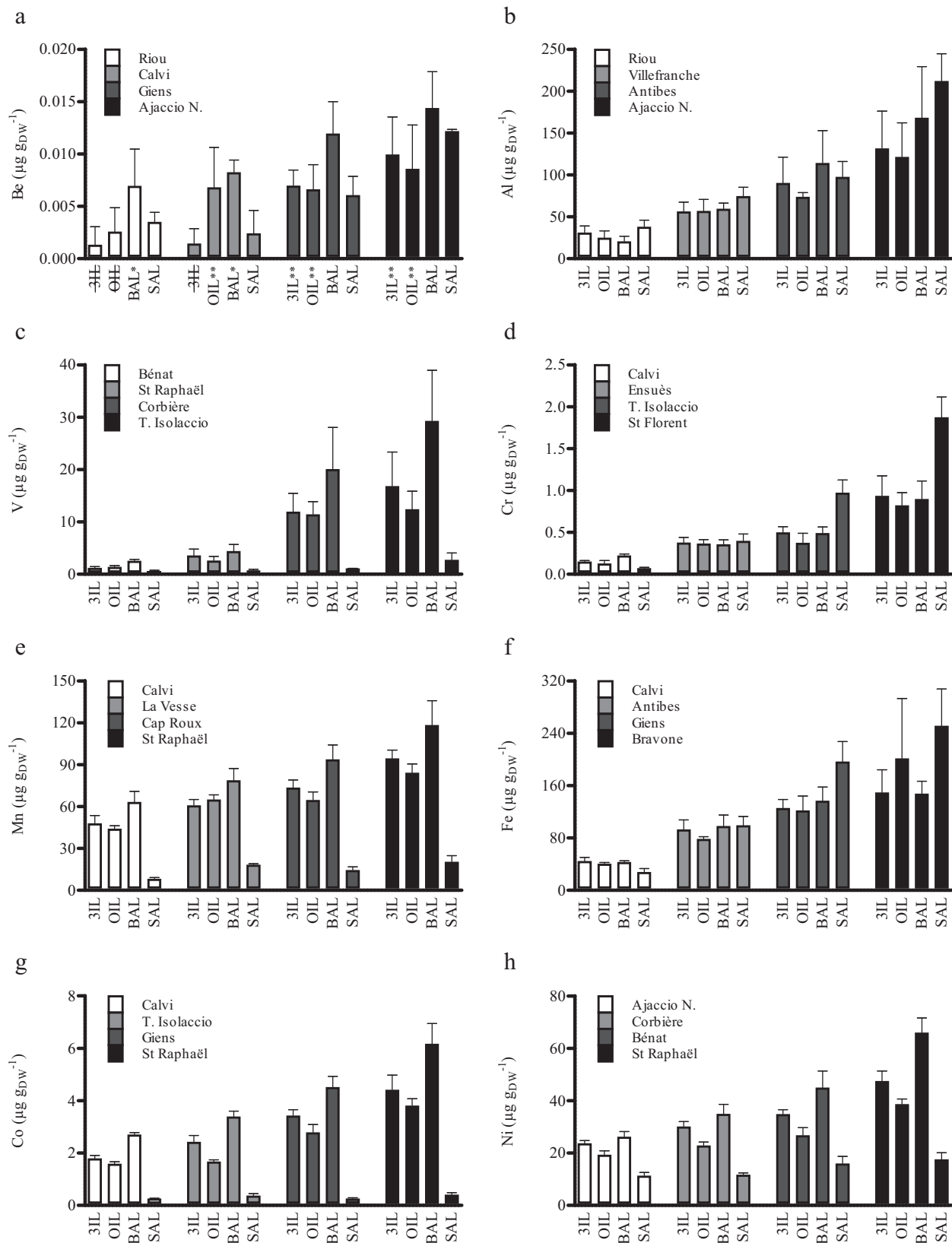
Annex to Table 1B (Continued). Spatial variation of trace element concentrations in *Posidonia oceanica* 3rd intermediate leaves (3IL; n = 3-5), other intermediate leaves (OIL; n = 5), blades of adult leaves (BAL; n = 4-5) and sheaths of adult leaves (SAL; n = 3-5). Concentrations are expressed as mean ± standard deviation in µg g_{DW}⁻¹. *, **, struck-through values and nd represent concentrations < L_Q, < L_D, < L_C and not detected, respectively. The number of replicates varies from 3 to 5, depending on site and compartment.

3IL	As		Se	Mo	Ag	Cd		Sn	Sb	Pb	Bi
PACA											
Ensuès (1)	3.72 ± 1.09		0.301 ± 0.035	1.61 ± 0.40	0.98 ± 0.14	2.29 ± 0.15		0.005 ± 0.006	0.173 ± 0.012	2.40 ± 0.23	0.0158 ± 0.0019
La Vesse (2)	1.89 ± 0.19	*	0.272 ± 0.024	1.14 ± 0.13	1.66 ± 0.20	2.64 ± 0.15	*	0.024 ± 0.010	0.143 ± 0.022	3.24 ± 0.27	0.0221 ± 0.0022
Corbière (3)	2.50 ± 0.38	*	0.223 ± 0.036	1.54 ± 0.17	0.84 ± 0.05	1.92 ± 0.09	*	0.056 ± 0.022	0.211 ± 0.041	4.05 ± 0.33	0.0230 ± 0.0021
P. Chèvres (4)	7.51 ± 0.64	*	0.233 ± 0.039	1.63 ± 0.13	1.03 ± 0.09	2.44 ± 0.26		0.005 ± 0.009	0.190 ± 0.021	2.69 ± 1.10	0.0403 ± 0.0111
Riou (5)	1.83 ± 0.16	*	0.224 ± 0.038	1.30 ± 0.14	1.08 ± 0.16	3.28 ± 0.14		nd	0.181 ± 0.015	1.36 ± 0.28	0.0145 ± 0.0035
Bénat (6)	1.25 ± 0.12	*	0.242 ± 0.035	1.62 ± 0.20	1.01 ± 0.12	3.09 ± 0.19		nd	0.196 ± 0.045	1.10 ± 0.04	0.0052 ± 0.0013
Giens (7)	0.94 ± 0.12	*	0.261 ± 0.023	1.32 ± 0.10	0.98 ± 0.09	3.26 ± 0.16		nd	0.194 ± 0.016	1.38 ± 0.16	0.0049 ± 0.0007
Cap Roux (8)	1.73 ± 0.43	*	0.229 ± 0.065	1.81 ± 0.16	0.84 ± 0.10	3.04 ± 0.16		nd	0.239 ± 0.025	1.45 ± 0.65	0.0093 ± 0.0020
St Raphaël (9)	1.10 ± 0.13		0.332 ± 0.041	1.67 ± 0.50	1.16 ± 0.20	4.53 ± 0.43	**	0.015 ± 0.095	0.193 ± 0.051	1.00 ± 0.18	0.0042 ± 0.0008
Antibes (10)	2.58 ± 0.35		0.326 ± 0.044	4.56 ± 2.53	0.81 ± 0.08	2.26 ± 0.08		nd	0.204 ± 0.026	1.08 ± 0.20	0.0079 ± 0.0017
Villefranche (11)	1.71 ± 0.09	*	0.242 ± 0.056	6.22 ± 4.26	0.70 ± 0.09	1.19 ± 0.09	*	0.026 ± 0.013	0.252 ± 0.037	3.85 ± 0.78	0.0205 ± 0.0034
Corsica											
Calvi (I)	2.80 ± 0.31		0.324 ± 0.048	5.80 ± 1.88	0.61 ± 0.03	2.70 ± 0.10		nd	0.147 ± 0.010	1.36 ± 0.28	0.0054 ± 0.0005
Aregno (II)	0.89 ± 0.03		0.296 ± 0.088	5.24 ± 2.94	1.28 ± 0.16	3.94 ± 0.12		nd	0.142 ± 0.020	0.91 ± 0.07	0.0035 ± 0.0004
St Florent (III)	0.93 ± 0.07	*	0.146 ± 0.044	1.69 ± 0.25	0.53 ± 0.04	1.72 ± 0.05		nd	0.180 ± 0.020	1.95 ± 0.34	0.0066 ± 0.0008
T. Isolaccio (IV)	1.15 ± 0.20	*	0.227 ± 0.052	4.23 ± 1.26	0.75 ± 0.03	2.27 ± 0.15		nd	0.200 ± 0.019	1.13 ± 0.18	0.0064 ± 0.0008
Bravone (V)	0.98 ± 0.05	*	0.156 ± 0.032	1.62 ± 0.19	1.10 ± 0.11	2.70 ± 0.23	*	0.028 ± 0.016	0.658 ± 0.158	2.20 ± 0.59	0.0049 ± 0.0006
Ajaccio S. (VI)	2.18 ± 0.15	*	0.272 ± 0.045	2.80 ± 0.46	1.23 ± 0.17	2.66 ± 0.09	**	0.019 ± 0.019	0.200 ± 0.014	2.38 ± 0.85	0.0083 ± 0.0016
Ajaccio N. (VII)	1.65 ± 0.12	*	0.152 ± 0.030	2.49 ± 0.50	0.56 ± 0.04	1.68 ± 0.08	*	0.023 ± 0.017	0.212 ± 0.016	5.77 ± 2.02	0.0142 ± 0.0031
OIL											
PACA											
Ensuès (1)	3.28 ± 0.23	**	0.343 ± 0.032	1.86 ± 0.30	1.06 ± 0.06	2.36 ± 0.08	*	0.048 ± 0.008	0.205 ± 0.019	2.49 ± 0.23	0.0158 ± 0.0015
La Vesse (2)	1.93 ± 0.14	**	0.306 ± 0.029	1.14 ± 0.06	1.80 ± 0.21	2.68 ± 0.17	*	0.062 ± 0.006	0.161 ± 0.010	3.25 ± 0.23	0.0212 ± 0.0011
Corbière (3)	2.42 ± 0.19	**	0.272 ± 0.037	1.68 ± 0.30	0.98 ± 0.10	2.05 ± 0.13	*	0.085 ± 0.016	0.240 ± 0.014	3.64 ± 0.22	0.0196 ± 0.0015
P. Chèvres (4)	7.54 ± 0.67	**	0.285 ± 0.036	1.83 ± 0.65	1.12 ± 0.13	2.31 ± 0.14	**	0.024 ± 0.013	0.176 ± 0.011	2.44 ± 0.34	0.0431 ± 0.0040
Riou (5)	1.62 ± 0.11		0.222 ± 0.027	1.14 ± 0.05	1.11 ± 0.08	2.97 ± 0.13		0.009 ± 0.005	0.162 ± 0.017	1.08 ± 0.18	0.0103 ± 0.0007
Bénat (6)	1.15 ± 0.12		0.243 ± 0.039	1.55 ± 0.31	1.09 ± 0.19	2.75 ± 0.18		0.005 ± 0.003	0.178 ± 0.035	1.03 ± 0.13	0.0046 ± 0.0015
Giens (7)	0.83 ± 0.08	**	0.272 ± 0.027	1.18 ± 0.15	1.14 ± 0.07	2.81 ± 0.17		0.004 ± 0.003	0.148 ± 0.008	1.17 ± 0.14	0.0045 ± 0.0004
Cap Roux (8)	1.22 ± 0.08		0.159 ± 0.038	1.63 ± 0.07	1.05 ± 0.13	2.90 ± 0.24		0.010 ± 0.003	0.184 ± 0.016	0.86 ± 0.04	0.0037 ± 0.0003
St Raphaël (9)	1.07 ± 0.11	**	0.268 ± 0.036	1.63 ± 0.29	1.27 ± 0.08	4.17 ± 0.26		0.000 ± 0.004	0.170 ± 0.010	0.91 ± 0.08	0.0045 ± 0.0012
Antibes (10)	2.33 ± 0.13	**	0.269 ± 0.035	3.26 ± 0.64	0.82 ± 0.07	2.09 ± 0.08		0.006 ± 0.011	0.181 ± 0.013	0.89 ± 0.09	0.0077 ± 0.0014
Villefranche (11)	1.61 ± 0.15		0.231 ± 0.026	3.86 ± 2.76	0.69 ± 0.03	1.07 ± 0.06	*	0.038 ± 0.021	0.219 ± 0.010	3.03 ± 0.60	0.0177 ± 0.0029
Corsica											
Calvi (I)	2.58 ± 0.26	**	0.356 ± 0.019	5.44 ± 1.42	0.67 ± 0.05	2.63 ± 0.08		nd	0.170 ± 0.018	1.44 ± 0.36	0.0044 ± 0.0004
Aregno (II)	0.92 ± 0.05	**	0.282 ± 0.054	5.70 ± 4.75	1.50 ± 0.17	3.50 ± 0.05	**	0.035 ± 0.048	0.126 ± 0.020	0.88 ± 0.20	0.0027 ± 0.0003
St Florent (III)	0.85 ± 0.05		0.230 ± 0.031	1.56 ± 0.35	0.66 ± 0.05	1.62 ± 0.09		0.005 ± 0.009	0.143 ± 0.008	1.46 ± 0.25	0.0050 ± 0.0008
T. Isolaccio (IV)	0.99 ± 0.11		0.199 ± 0.039	2.59 ± 0.69	0.94 ± 0.05	2.05 ± 0.15		0.004 ± 0.002	0.153 ± 0.009	0.75 ± 0.05	0.0062 ± 0.0017
Bravone (V)	1.21 ± 0.32		0.184 ± 0.045	1.49 ± 0.13	1.24 ± 0.15	2.72 ± 0.08	*	0.062 ± 0.017	0.705 ± 0.156	2.43 ± 0.61	0.0045 ± 0.0012
Ajaccio S. (VI)	1.95 ± 0.29	**	0.311 ± 0.084	3.22 ± 0.87	1.29 ± 0.16	2.59 ± 0.12	*	0.039 ± 0.013	0.206 ± 0.049	1.78 ± 0.59	0.0075 ± 0.0015
Ajaccio N. (VII)	1.66 ± 0.15	**	0.267 ± 0.022	2.69 ± 0.38	0.58 ± 0.04	1.59 ± 0.13	*	0.044 ± 0.026	0.191 ± 0.020	4.51 ± 1.46	0.0114 ± 0.0031

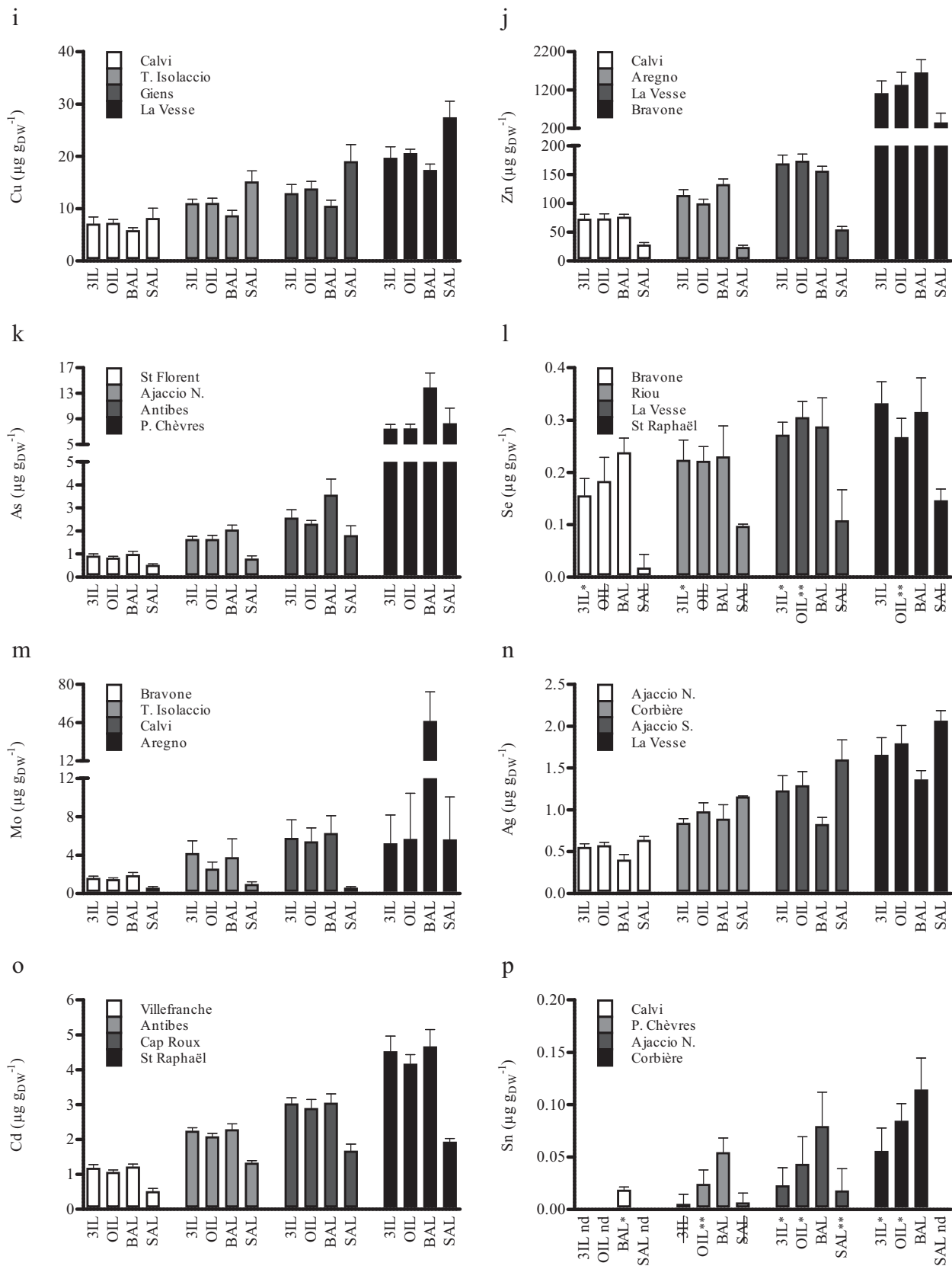
Annex to Table 1B (Continued). Spatial variation of trace element concentrations in *Posidonia oceanica* 3rd intermediate leaves (3IL; n = 3-5), other intermediate leaves (OIL; n = 5), blades of adult leaves (BAL; n = 4-5) and sheaths of adult leaves (SAL; n = 3-5). Concentrations are expressed as mean ± standard deviation in µg g_{DW}⁻¹. *, **, struck-through values and nd represent concentrations < L_Q, < L_D, < L_C and not detected, respectively. The number of replicates varies from 3 to 5, depending on site and compartment.

BAL	As	Se	Mo	Ag	Cd	Sn	Sb	Pb	Bi
PACA									
Ensuès (1)	3.76 ± 0.52	0.285 ± 0.043	1.63 ± 0.28	0.56 ± 0.11	1.99 ± 0.12	* 0.041 ± 0.013	0.227 ± 0.010	3.21 ± 0.23	0.0207 ± 0.0011
La Vesse (2)	2.57 ± 0.37	0.288 ± 0.055	1.33 ± 0.14	1.36 ± 0.10	2.35 ± 0.11	0.105 ± 0.018	0.199 ± 0.007	6.08 ± 0.74	0.0393 ± 0.0052
Corbière (3)	2.81 ± 0.27	0.240 ± 0.047	1.95 ± 0.20	0.89 ± 0.17	1.49 ± 0.11	0.115 ± 0.030	0.257 ± 0.039	6.12 ± 1.12	0.0320 ± 0.0045
P. Chèvres (4)	13.97 ± 2.22	0.386 ± 0.051	4.16 ± 3.16	0.59 ± 0.06	1.97 ± 0.09	0.055 ± 0.014	0.239 ± 0.009	5.81 ± 0.58	0.0700 ± 0.0044
Riou (5)	2.01 ± 0.22	0.231 ± 0.059	1.40 ± 0.28	0.70 ± 0.11	2.95 ± 0.20	* 0.017 ± 0.008	0.216 ± 0.021	1.82 ± 0.28	0.0181 ± 0.0026
Bénat (6)	1.46 ± 0.14	0.220 ± 0.033	2.03 ± 0.45	0.95 ± 0.19	3.21 ± 0.36	* 0.024 ± 0.004	0.232 ± 0.029	1.83 ± 0.20	0.0067 ± 0.0007
Giens (7)	1.15 ± 0.08	0.178 ± 0.018	1.46 ± 0.17	0.75 ± 0.03	3.35 ± 0.19	* 0.026 ± 0.004	0.232 ± 0.016	2.28 ± 0.27	0.0066 ± 0.0010
Cap Roux (8)	2.15 ± 0.17	0.217 ± 0.031	2.04 ± 0.22	0.55 ± 0.04	3.05 ± 0.26	* 0.037 ± 0.012	0.272 ± 0.024	1.77 ± 0.14	0.0081 ± 0.0013
St Raphaël (9)	1.34 ± 0.14	0.315 ± 0.065	1.78 ± 0.29	0.72 ± 0.09	4.67 ± 0.48	* 0.020 ± 0.003	0.233 ± 0.029	1.52 ± 0.26	0.0067 ± 0.0009
Antibes (10)	3.59 ± 0.67	0.297 ± 0.024	3.28 ± 1.32	0.74 ± 0.08	2.29 ± 0.16	* 0.027 ± 0.005	0.238 ± 0.021	1.80 ± 0.24	0.0118 ± 0.0021
Villefranche (11)	2.00 ± 0.21	0.257 ± 0.045	3.81 ± 1.58	0.75 ± 0.11	1.22 ± 0.07	0.098 ± 0.009	0.331 ± 0.024	5.48 ± 1.07	0.0379 ± 0.0041
Corsica									
Calvi (I)	3.57 ± 0.58	0.331 ± 0.036	6.31 ± 1.80	0.40 ± 0.06	2.64 ± 0.13	* 0.019 ± 0.003	0.249 ± 0.015	2.03 ± 0.20	0.0082 ± 0.0007
Aregno (II)	1.05 ± 0.02	0.330 ± 0.038	47.63 ± 25.51	0.64 ± 0.03	4.40 ± 0.10	* 0.023 ± 0.029	0.262 ± 0.008	1.45 ± 0.08	* 0.0047 ± 0.0006
St Florent (III)	1.01 ± 0.12	0.194 ± 0.045	1.52 ± 0.14	0.41 ± 0.03	1.89 ± 0.11	* 0.026 ± 0.011	0.255 ± 0.127	3.00 ± 0.61	0.0089 ± 0.0022
T. Isolaccio (IV)	1.38 ± 0.29	0.244 ± 0.086	3.79 ± 1.90	0.46 ± 0.05	2.54 ± 0.15	* 0.025 ± 0.011	0.225 ± 0.020	1.76 ± 0.13	0.0085 ± 0.0008
Bravone (V)	1.25 ± 0.11	0.239 ± 0.027	1.93 ± 0.26	1.02 ± 0.08	2.63 ± 0.09	0.059 ± 0.040	0.875 ± 0.178	3.47 ± 0.60	0.0073 ± 0.0005
Ajaccio S. (VI)	2.55 ± 0.22	0.274 ± 0.019	4.21 ± 0.84	0.83 ± 0.08	2.63 ± 0.28	0.072 ± 0.060	0.247 ± 0.019	3.13 ± 0.53	0.0153 ± 0.0027
Ajaccio N. (VII)	2.07 ± 0.19	0.184 ± 0.023	2.60 ± 0.22	0.41 ± 0.06	1.75 ± 0.05	0.080 ± 0.032	0.228 ± 0.034	5.91 ± 0.79	0.0185 ± 0.0029
SAL									
PACA									
Ensuès (1)	2.89 ± 0.27	0.162 ± 0.009	0.77 ± 0.14	1.56 ± 0.14	1.34 ± 0.12	nd	* 0.019 ± 0.007	0.83 ± 0.05	* 0.0072 ± 0.0016
La Vesse (2)	1.74 ± 0.33	0.109 ± 0.058	0.78 ± 0.27	2.07 ± 0.12	0.84 ± 0.03	nd	* 0.022 ± 0.010	1.09 ± 0.13	* 0.0077 ± 0.0009
Corbière (3)	2.28 ± 0.20	0.095 ± 0.029	0.57 ± 0.00	1.16 ± 0.00	0.87 ± 0.03	nd	* 0.016 ± 0.008	1.23 ± 0.12	* 0.0070 ± 0.0013
P. Chèvres (4)	8.34 ± 2.36	0.156 ± 0.009	0.82 ± 0.09	1.32 ± 0.05	1.40 ± 0.07	0.007 ± 0.009	* 0.023 ± 0.000	1.08 ± 0.13	0.0248 ± 0.0003
Riou (5)	1.09 ± 0.17	0.098 ± 0.003	0.57 ± 0.07	1.55 ± 0.12	1.86 ± 0.04	nd	** 0.011 ± 0.001	0.60 ± 0.09	* 0.0078 ± 0.0020
Bénat (6)	0.95 ± 0.10	0.159 ± 0.034	0.78 ± 0.23	1.22 ± 0.02	1.23 ± 0.03	nd	** 0.011 ± 0.005	0.40 ± 0.18	0.0002 ± 0.0006
Giens (7)	0.74 ± 0.18	0.107 ± 0.019	0.69 ± 0.07	1.44 ± 0.04	1.21 ± 0.09	nd	* 0.017 ± 0.008	0.64 ± 0.10	0.0010 ± 0.0006
Cap Roux (8)	0.95 ± 0.19	0.092 ± 0.022	0.79 ± 0.07	1.12 ± 0.13	1.68 ± 0.19	nd	** 0.009 ± 0.003	0.40 ± 0.05	** 0.0029 ± 0.0015
St Raphaël (9)	0.93 ± 0.16	0.147 ± 0.021	1.03 ± 0.16	1.44 ± 0.12	1.94 ± 0.09	nd	* 0.022 ± 0.020	0.51 ± 0.15	* 0.0047 ± 0.0012
Antibes (10)	1.82 ± 0.41	0.059 ± 0.015	0.81 ± 0.24	1.25 ± 0.05	1.33 ± 0.06	nd	* 0.016 ± 0.004	0.43 ± 0.06	** 0.0030 ± 0.0006
Villefranche (11)	1.81 ± 0.18	0.071 ± 0.051	0.63 ± 0.04	0.65 ± 0.05	0.52 ± 0.08	nd	** 0.011 ± 0.002	0.99 ± 0.06	* 0.0070 ± 0.0009
Corsica									
Calvi (I)	1.42 ± 0.21	0.130 ± 0.049	0.61 ± 0.10	0.69 ± 0.04	1.19 ± 0.13	nd ±	nd	0.30 ± 0.16	0.0011 ± 0.0004
Aregno (II)	0.84 ± 0.14	0.155 ± 0.025	5.63 ± 4.45	1.38 ± 0.17	1.32 ± 0.15	0.120 ± 0.264	0.004 ± 0.013	0.32 ± 0.17	0.0011 ± 0.0003
St Florent (III)	0.53 ± 0.05	0.188 ± 0.008	0.42 ± 0.02	0.83 ± 0.09	0.86 ± 0.12	nd ±	nd	0.48 ± 0.18	** 0.0025 ± 0.0011
T. Isolaccio (IV)	1.27 ± 0.22	nd	1.00 ± 0.22	1.21 ± 0.10	1.10 ± 0.05	nd ±	* 0.014 ± 0.011	0.45 ± 0.06	0.0018 ± 0.0007
Bravone (V)	1.25 ± 0.31	0.048 ± 0.025	0.61 ± 0.11	1.30 ± 0.15	1.05 ± 0.07	** 0.012 ± 0.041	0.228 ± 0.127	0.77 ± 0.22	** 0.0035 ± 0.0006
Ajaccio S. (VI)	1.77 ± 0.34	0.177 ± 0.077	2.17 ± 1.57	1.60 ± 0.23	1.04 ± 0.07	** 0.014 ± 0.020	* 0.014 ± 0.003	0.68 ± 0.17	* 0.0054 ± 0.0023
Ajaccio N. (VII)	0.81 ± 0.12	** 0.220 ± 0.024	0.93 ± 0.16	0.64 ± 0.04	0.75 ± 0.06	** 0.018 ± 0.021	* 0.018 ± 0.009	0.90 ± 0.28	** 0.0031 ± 0.0013

Annex to Table 1B (Continued). Spatial variation of trace element concentrations in *Posidonia oceanica* 3rd intermediate leaves (3IL; n = 3-5), other intermediate leaves (OIL; n = 5), blades of adult leaves (BAL; n = 4-5) and sheaths of adult leaves (SAL; n = 3-5). Concentrations are expressed as mean ± standard deviation in µg g_{DW}⁻¹. *, **, struck-through values and nd represent concentrations < L_D, < L_D, < L_C and not detected, respectively. The number of replicates varies from 3 to 5, depending on site and compartment.

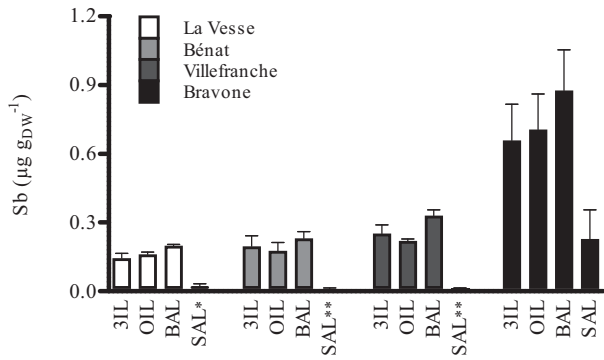


Annex to Fig.2. *Posidonia oceanica* compartmentalization of Be, Al, V, Cr, Mn, Fe, Co and Ni (a–h) at 4 of the 18 sites. Concentrations are expressed as mean \pm standard deviation in $\mu\text{g g}_{\text{DW}}^{-1}$. X-labels indicate the different compartments: third intermediate leaves (3IL), other intermediate leaves (OIL), blades of adult leaves (BAL) and sheaths of adult leaves (SAL); *, **, struck-through compartments and nd represent concentrations $<L_Q$, $<L_D$, $<L_C$ and not detected, respectively. The number of replicates varies from 3 to 5, depending on site and compartment.

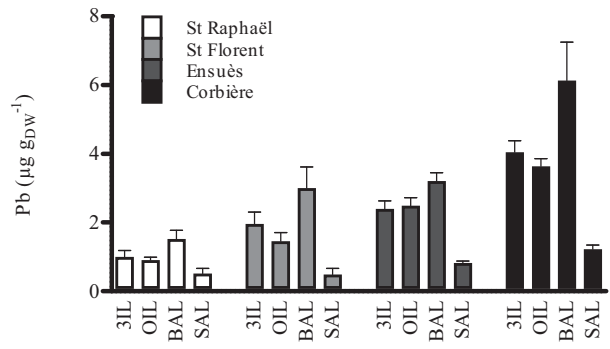


Annex to Fig.2 (Continued). *Posidonia oceanica* compartmentalization of Cu, Zn, As, Se, Mo, Ag, Cd and Sn (i-p) at 4 of the 18 sites. Concentrations are expressed as mean \pm standard deviation in $\mu\text{g g}_{\text{DW}}^{-1}$. X-labels indicate the different compartments: third intermediate leaves (3IL), other intermediate leaves (OIL), blades of adult leaves (BAL) and sheaths of adult leaves (SAL); *, **, struck-through compartments and nd represent concentrations $<L_Q$, $<L_D$, $<L_C$ and not detected, respectively. The number of replicates varies from 3 to 5, depending on site and compartment.

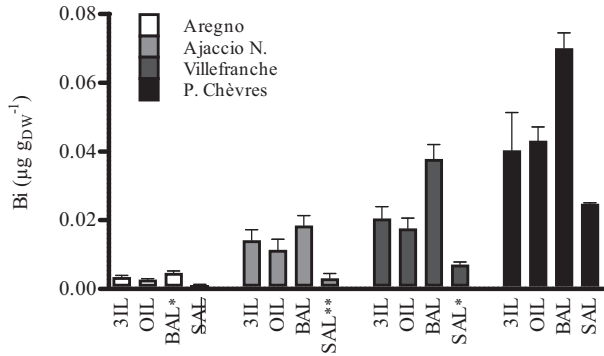
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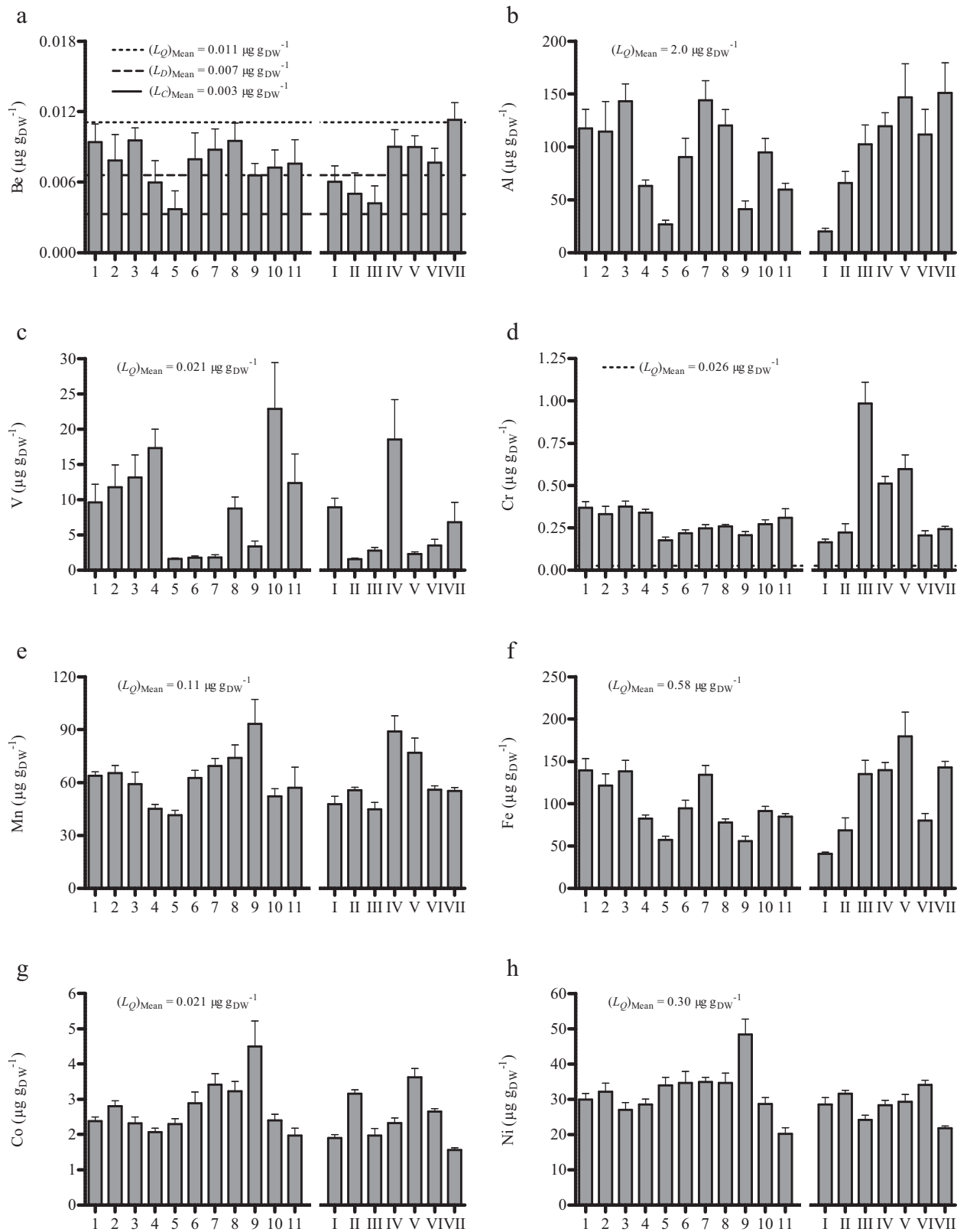
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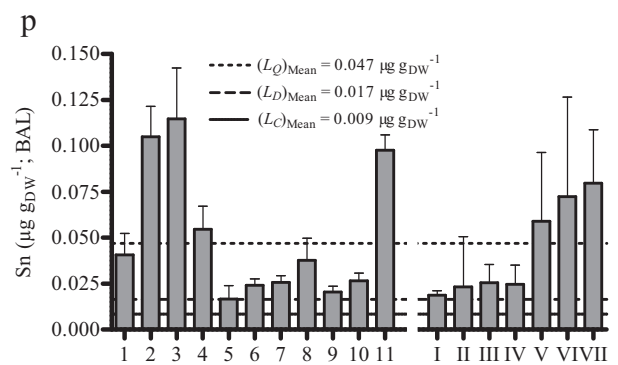
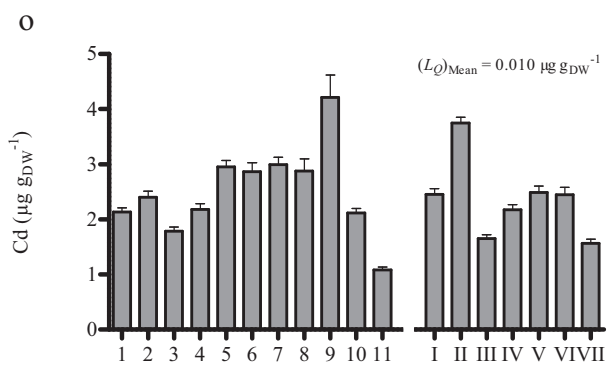
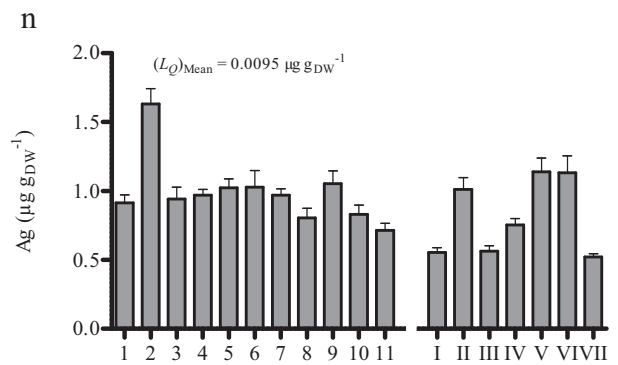
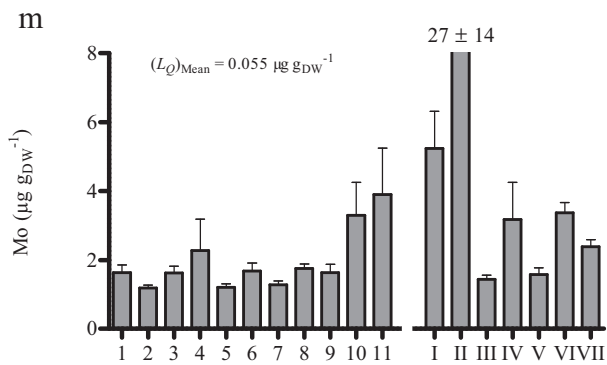
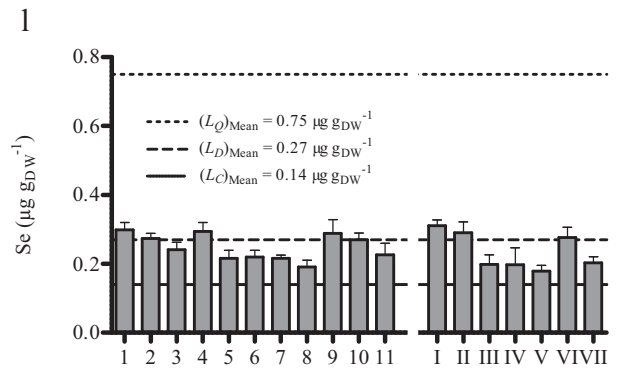
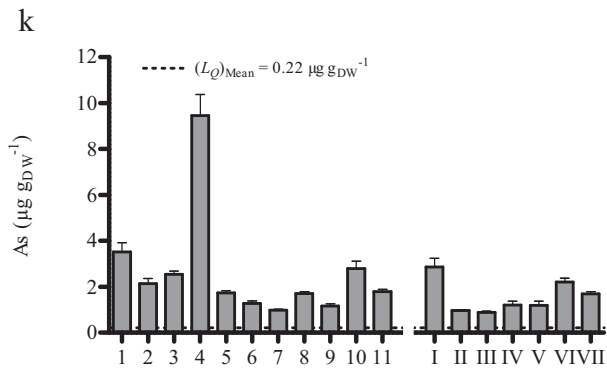
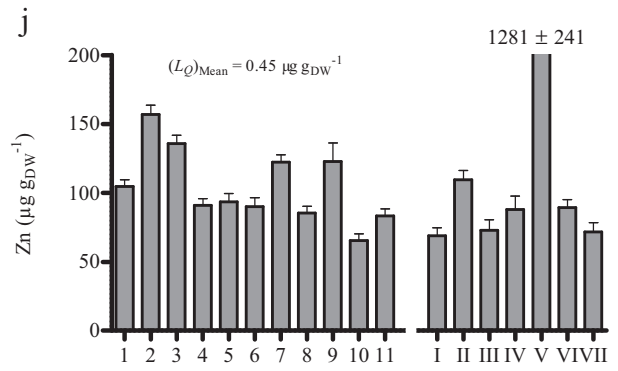
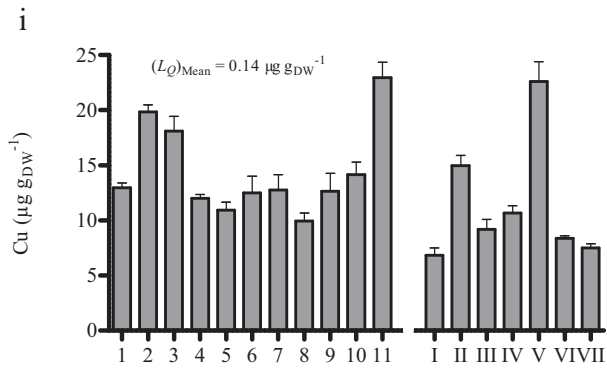
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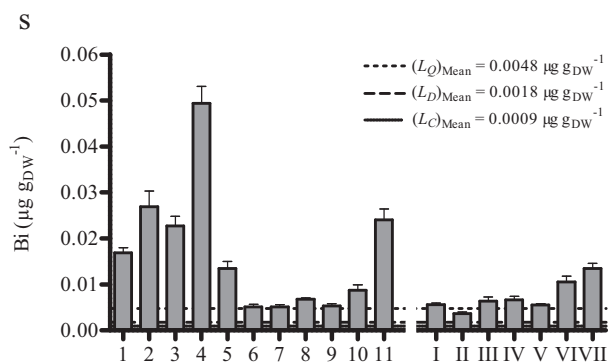
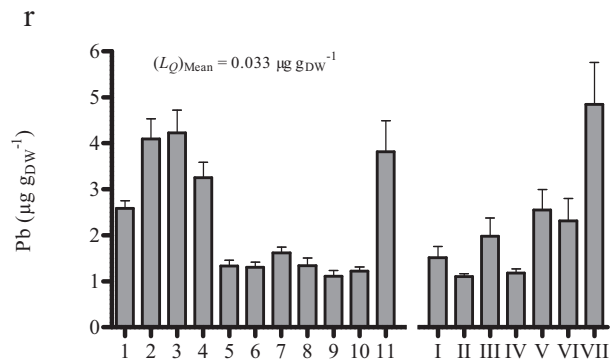
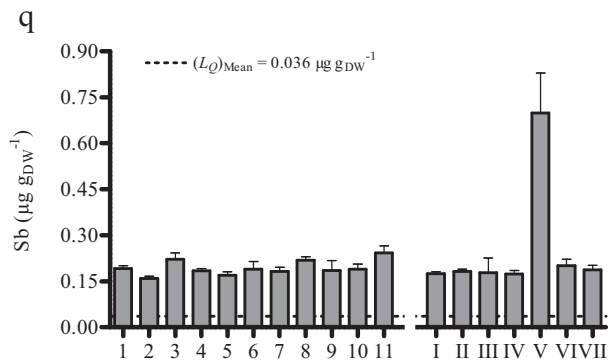
Annex to Fig.2 (Continued). *Posidonia oceanica* compartmentalization of Sb, Pb and Bi (q-s) at 4 of the 18 sites. Concentrations are expressed as mean \pm standard deviation in $\mu\text{g g}_{\text{DW}}^{-1}$. X-labels indicate the different compartments: third intermediate leaves (3IL), other intermediate leaves (OIL), blades of adult leaves (BAL) and sheaths of adult leaves (SAL); *, **, struck-through compartments and nd represent concentrations $<L_Q$, $<L_D$, $<L_C$ and not detected, respectively. The number of replicates varies from 3 to 5, depending on site and compartment.



Annex to Fig.3. Spatial variation of Be, Al, V, Cr, Mn, Fe, Co and Ni (a-h) concentrations in *Posidonia oceanica* shoots at the 18 sites: Ensues (1), La Vesse (2), Corbière (3), Plateau des Chèvres (4), Riou (5), Bénat (6), Giens (7), Cap Roux (8), St Raphaël (9), Antibes (10), Villefranche (11), Calvi (I), Aregno (II), St Florent (III), Taglio Isolaccio (IV), Bravone (V), Ajaccio Sud (VI) and Ajaccio Nord (VII). X-axis labels indicate the sites along the coasts (1–11: PACA; I–VII: Corsica). Concentrations are expressed as mean \pm standard deviation in $\mu\text{g g}_{\text{DW}}^{-1}$.



Annex to Fig.3 (Continued). Spatial variation of Cu, Zn, As, Se, Mo, Ag, Cd and Sn (BAL) (i-p) concentrations in *Posidonia oceanica* shoots at the 18 sites: Ensues (1), La Vesse (2), Corbière (3), Plateau des Chèvres (4), Riou (5), Bénat (6), Giens (7), Cap Roux (8), St Raphaël (9), Antibes (10), Villefranche (11), Calvi (I), Aregno (II), St Florent (III), Taglio Isolaccio (IV), Bravone (V), Ajaccio Sud (VI) and Ajaccio Nord (VII). X-axis labels indicate the sites along the coasts (1–11: PACA; I–VII: Corsica). Concentrations are expressed as mean ± standard deviation in $\mu\text{g g}_{\text{DW}}^{-1}$.



Annex to Fig.3 (Continued). Spatial variation of Sb, Pb and Bi (q-s) concentrations in *Posidonia oceanica* shoots at the 18 sites: Ensues (1), La Vesse (2), Corbière (3), Plateau des Chèvres (4), Riou (5), Bénat (6), Giens (7), Cap Roux (8), St Raphaël (9), Antibes (10), Villefranche (11), Calvi (I), Aregno (II), St Florent (III), Taglio Isolaccio (IV), Bravone (V), Ajaccio Sud (VI) and Ajaccio Nord (VII). X-axis labels indicate the sites along the coasts (1–11: PACA; I–VII: Corsica). Concentrations are expressed as mean \pm standard deviation in $\mu\text{g g}_{\text{DW}}^{-1}$.