

## SUPPLEMENTARY DATA

TABLE S1. Locations of the 85 populations of *Beta vulgaris* ssp. *maritima* sampled in this study and used in the sequential greenhouse germination test. Populations 3, 4, 19, 26, 71 and 72 were sampled again in 2006 to compare dormancy between two consecutive years. Populations 2, 3, 4, 10, 16, 19, 29, 37, 41, 60, 63, 68, 70, 75, 81, 84 were also used in the common garden experiment. Populations 3, 16, 37, 63 and 70 were also used in the control experiment.

N°	Locations	Latitude	Longitude	N°	Locations	Latitude	Longitude
1	Hem de Mark	50.982	2.000	44	Ré Island	46.231	-1.416
2	Les huttes d'Oye	50.983	2.345	45	Ré Island	46.163	-1.279
3	Audresselles	50.750	1.500	46	Ré Island	46.145	-1.316
4	Etaples	50.675	1.617	47	Châtelaillon plage	46.067	-1.093
5	Bréhat Island	48.865	-2.986	48	Oléron Island	46.045	-1.399
6	Bréhat Island	48.854	-2.997	49	Oléron Island	46.014	-1.336
7	Bréhat Island	48.850	-2.999	50	Oléron Island	45.913	-1.324
8	Bréhat Island	48.846	-2.998	51	Pointe de Chapus	45.854	-1.167
9	Trégastel	48.825	-3.504	52	Oléron island	45.847	-1.207
10	Pointe de l'Arcouest	48.822	-3.014	53	Ronces les bains	45.793	-1.177
11	Batz Island	48.753	-4.014	54	La Tremblade	45.793	-1.145
12	Batz Island	48.744	-4.037	55	La Tremblade	45.784	-1.129
13	Batz Island	48.743	-4.016	56	La Grande Côte	45.647	-1.114
14	Batz Island	48.741	-4.006	57	Meschers	45.557	-0.945
15	Roscoff	48.713	-3.997	58	Talmont	45.539	-0.907
16	Cancale	48.699	-1.850	59	Mortagne sur Gironde	45.475	-0.798
17	Plouha	48.675	-2.883	60	Pointe aux oiseaux	45.473	-1.002
18	Anse de kernic	48.669	-4.212	61	Port de Goulée	45.404	-0.910
19	Plestin les grèves	48.669	-3.607	62	Pauillac	45.195	-0.744
20	Guisseny	48.638	-4.410	63	Ares	44.762	-1.147
21	Sable d'or les pins	48.637	-2.410	64	Cassyl	44.709	-1.057
22	Mont Saint Michel	48.631	-1.509	65	Nerac	44.138	0.342
23	Phare de l'île vierge	48.626	-4.565	66	Contis plage	44.089	-1.323
24	La richardais	48.611	-2.035	67	Castelnau d'Arbieu	43.883	0.707
25	Notre Dame du Guildo	48.573	-2.212	68	Grenade	43.773	1.296
26	port Saint hubert	48.535	-1.972	69	Maugio	43.588	4.020
27	Telgruc sur mer	48.210	-4.369	70	Vacarès	43.566	4.590
28	Nevez	47.789	-3.804	71	La Grande Motte	43.563	4.101
29	Etel	47.655	-3.205	72	Palavas les Flots	43.523	3.918
30	Port Blanc	47.604	-2.864	73	Frontignan	43.445	3.761
31	Piriac sur mer	47.383	-2.536	74	Mèze	43.430	3.613
32	Saint-Brévin les pins	47.269	-2.150	75	Eromardie	43.408	-1.639
33	Saint Michel-Chef-Chef	47.197	-2.158	76	Castelnaudary	43.334	1.955
34	Préfaïlles	47.136	-2.242	77	La Tamarissière	43.283	3.443
35	Noirmoutier Island	47.028	-2.263	78	Les Goudes	43.223	5.346
36	Noirmoutier Island	46.971	-2.213	79	Puichéric	43.223	2.620
37	Bretignoles sur mer	46.618	-1.870	80	Marseillette	43.212	2.537
38	Sables d'olonne	46.525	-1.809	81	La Ciotat	43.181	5.613
39	Talmont Saint Hilaire	46.432	-1.635	82	Narbonne plage	43.169	3.184
40	Ecluse du Broult	46.342	-1.158	83	Les Bages	43.120	2.990
41	Aiguillon sur mer	46.294	-1.254	84	Leucate	42.905	3.042
42	Pointe Saint Clément	46.254	-1.139	85	Grau de Leucate	42.889	3.048
43	Ré Island	46.244	-1.562				

TABLE S2. Variation range of the bioclimatic variables.

Bioclimatic variable	Unit	Mean	Min	Max	SD
Annual mean temperature	°C	12.45	10.43	15.24	1.18
Mean monthly temperature range <sup>a</sup>	°C	7.79	5.86	10.51	1.33
Isothermality <sup>b</sup>	°C	37.11	31.33	41.21	1.91
Temperature seasonality <sup>c</sup>	°C	502.47	375.74	618.51	65.5
Maximum temperature of warmest month	°C	23.82	20	29	2.86
Minimum temperature of coldest month	°C	2.85	0.7	4.7	0.75
Temperature annual range <sup>d</sup>	°C	20.97	16.1	27.1	3.27
Mean temperature of wettest quarter	°C	9.18	6.1	15.32	2.6
Mean temperature of driest quarter	°C	17.55	6.55	22.55	3.49
Mean temperature of warmest quarter	°C	18.65	15.93	22.55	1.91
Mean temperature of coldest quarter	°C	6.36	4.25	8.55	0.74
Annual precipitation	mm	820.67	599	1327	140.45
Precipitation in the wettest month	mm	101.59	74	160	16.82
Precipitation in the driest month	mm	40.52	12	68	10.79
Precipitation seasonality <sup>e</sup>	dimensionless	27.55	12.5	40.73	5.77
Mean precipitation in the wettest quarter	mm	276.45	202	439	53.19
Mean precipitation in the driest quarter	mm	144.38	72	253	31
Mean precipitation in the warmest quarter	mm	160.04	72	276	36.61
Mean precipitation in the coldest quarter	mm	248.34	150	398	59.66

<sup>a</sup> Mean of monthly (maximum temperature – minimum temperature)

<sup>b</sup> (Mean monthly temperature range/Temperature annual range) × 100

<sup>c</sup> Standard deviation × 100

<sup>d</sup> Maximum temperature of warmest month – Minimum temperature of coldest month

<sup>e</sup> Coefficient of variation