

Table S1: Results of PERMANOVA (a) main test and (b) pairwise tests testing for differences in concentration of Total Phenolic Compounds (TPC) in *Ericaria amentacea* for the factors Treatment (Natural and Transplanted), Time (T0, T1, T2, T3 and T4) and Site (Barcarello and Capo Gallo). Significant p values are highlighted in bold.

Total Phenolic Compounds (TPC)				
<b>a) Main Test</b>				
Source of variation	df	MS	Pseudo-F	P(perm)
Treatment (Tr)	1	27.23	133.62	<b>0.053</b>
Time (Ti)	4	48.34	2.41	0.255
Site (Si)	1	64.59	22.42	<b>0.001</b>
Tr x Ti	3	0.54	0.65	0.626
Tr x Si	1	0.20	0.07	0.777
Ti x Si	3	19.32	6.71	<b>0.001</b>
Tr x Ti x Si	2	0.83	0.29	0.772
Residuals	64	2.88		
<b>b) Pair-wise tests</b>				
(between Times within Sites)				
Times	Barcarello		Capo Gallo	
	t	P(perm)	t	P(perm)
T0, T1	1.51	0.131	2.15	<b>0.060</b>
T0, T2	0.98	0.343	4.13	<b>0.002</b>
T0, T3	1.39	0.181	9.94	<b>0.001</b>
T0, T4	5.33	<b>0.001</b>	-	
T1, T2	0.73	0.474	3.07	<b>0.007</b>
T1, T3	1.05	0.338	6.47	<b>0.001</b>
T1, T4	5.85	<b>0.001</b>	-	
T2, T3	0.20	0.841	3.49	<b>0.003</b>
T2, T4	5.37	<b>0.001</b>	-	
T3, T4	7.78	<b>0.001</b>	-	

Table S2: Results of PERMANOVA (a) main test and (b) pairwise tests testing for differences in concentration of Total Lipids (TL) in *Ericaria amentacea* for the factors Treatment (Natural and Transplanted), Time (T0, T1, T2, T3 and T4) and Site (Barcarello and Capo Gallo). Significant p values are highlighted in bold.

Total Lipids (TL)				
<b>a) Main Test</b>				
Source of variation	df	MS	Pseudo-F	P(perm)
Treatment (Tr)	1	321.55	2.78	0.287
Time (Ti)	4	95.12	1.43	0.466
Site (Si)	1	10.36	0.37	0.553
Tr x Ti	3	6.07	4.99	0.285
Tr x Si	1	118.27	4.27	<b>0.046</b>
Ti x Si	2	62.02	2.24	0.112
Tr x Ti x Si	1	0.44	0.02	0.899
Residuals	55	27.68		
<b>b) Pair-wise tests</b>				
	(between Treatments within Sites)			
	Barcarello		Capo Gallo	
Treatments	t	P(perm)	t	P(perm)
NAT, TRANSP	2.06	<b>0.045</b>	3.08	<b>0.006</b>

Table S3: Results of PERMANOVA (a) main test and (b) pairwise tests testing for differences in Fatty Acid (FA) profiles in *Ericaria amentacea* for the factors Treatment (Natural and Transplanted), Time (T0, T1, T2, T3 and T4) and Site (Barcarello and Capo Gallo). Significant p values are highlighted in bold.

Fatty acids (FA)				
<b>a) Main Test</b>				
Source of variation	df	MS	Pseudo-F	P(perm)
Treatment (Tr)	1	9.9E-03	5.05	<b>0.023</b>
Time (Ti)	4	4.3E-02	16.18	<b>0.003</b>
Site (Si)	1	1.1E-02	12.57	<b>0.001</b>
Tr x Ti	3	4.2E-03	1.45	0.390
Tr x Si	1	2.0E-03	2.22	0.061
Ti x Si	2	2.4E-03	2.63	<b>0.014</b>
Tr x Ti x Si	1	3.0E-03	3.31	<b>0.016</b>
Residuals	54	9.0E-04		
<b>b) Pair-wise tests (between Times within Sites and Treatments)</b>				
<b>Site: Barcarello</b>				
Times	Natural		Transplanted	
	t	P(perm)	t	P(perm)
T0, T1	4.98	<b>0.009</b>	3.96	<b>0.005</b>
T0, T2	2.54	<b>0.005</b>	2.81	<b>0.006</b>
T0, T3	3.58	<b>0.010</b>	4.18	<b>0.009</b>
T0, T4	4.14	<b>0.007</b>	4.18	<b>0.012</b>
T1, T2	5.25	<b>0.006</b>	4.04	<b>0.008</b>
T1, T3	6.43	<b>0.014</b>	7.83	<b>0.007</b>
T1, T4	8.05	<b>0.010</b>	7.78	<b>0.005</b>
T2, T3	2.17	<b>0.011</b>	5.22	<b>0.013</b>
T2, T4	3.60	<b>0.012</b>	6.14	<b>0.006</b>
T3, T4	2.94	<b>0.015</b>	4.71	<b>0.006</b>
<b>Site: Capo Gallo</b>				
Times	Natural		Transplanted	
	t	P(perm)	t	P(perm)
T0, T1	3.82	<b>0.006</b>	2.31	<b>0.024</b>
T0, T2	1.64	0.089	2.98	<b>0.008</b>
T1, T2	4.01	<b>0.007</b>	4.23	<b>0.007</b>
<b>c) Pair-wise tests (between Treatments within Sites and Times)</b>				
<b>Site: Barcarello</b>				
Treatments	Times	t	P(perm)	
NAT, TRANSP	T1	1.50	0.101	
	T2	1.19	0.244	
	T3	3.31	<b>0.013</b>	
	T4	2.60	<b>0.020</b>	
<b>Site: Capo Gallo</b>				
Treatments	Times	t	P(perm)	
NAT, TRANSP	T1	2.65	<b>0.008</b>	
NAT, TRANSP	T2	2.52	<b>0.008</b>	

Table S4: Results of PERMANOVA (a) main test and (b) pairwise tests testing for differences in relative abundance of Fatty Acid (FA) classes in *Ericaria amentacea* for the factors Treatment (Natural and Transplanted), Time (T0, T1, T2, T3 and T4) and Site (Barcarello and Capo Gallo). Significant p values are highlighted in bold.

Fatty acid (FA) classes										
a) Main Test		i) Saturated FA (SFA)			ii) Monounsaturated FA (MUFA)			iii) Polyunsaturated FA (PUFA)		
Source of variation	df	MS	Pseudo-F	P(perm)	MS	Pseudo-F	P(perm)	MS	Pseudo-F	P(perm)
Treatment (Tr)	1	4.2E-03	3.46	0.244	9.8E-04	2.32	0.315	1.0E-02	2.58	0.291
Time (Ti)	4	9.6E-03	12.07	0.081	1.5E-02	9.76	0.097	5.4E-02	14.48	0.072
Site (Si)	1	4.7E-03	26.51	<b>0.001</b>	1.1E-03	3.66	0.064	1.4E-02	18.13	0.001
Tr x Ti	3	1.9E-03	4.48	0.293	5.0E-04	0.31	0.800	1.3E-03	0.29	0.855
Tr x Si	1	1.2E-03	6.93	<b>0.010</b>	4.3E-04	1.43	0.221	4.2E-03	5.50	<b>0.019</b>
Ti x Si	2	7.1E-04	3.97	<b>0.033</b>	1.3E-03	4.51	<b>0.012</b>	3.3E-03	4.38	<b>0.014</b>
Tr x Ti x Si	1	4.4E-04	2.44	0.132	1.7E-03	5.56	<b>0.022</b>	4.6E-03	6.07	<b>0.010</b>
Residuals	54	1.8E-04			3.0E-04			7.6E-04		

  

		iv) $\omega$ -3 PUFA			v) $\omega$ -6 PUFA			vi) Bacterial FA (BAFA)		
Source of variation	df	MS	Pseudo-F	P(perm)	MS	Pseudo-F	P(perm)	MS	Pseudo-F	P(perm)
Treatment (Tr)	1	1.6E-02	4.58	0.188	1.2E-03	105.98	<b>0.004</b>	2.0E-05	3.58	0.260
Time (Ti)	4	5.8E-02	28.19	<b>0.044</b>	8.5E-03	14.70	<b>0.046</b>	2.6E-04	71.44	<b>0.015</b>
Site (Si)	1	1.4E-02	22.80	<b>0.001</b>	2.6E-04	1.23	0.278	3.1E-06	0.48	0.497
Tr x Ti	3	1.6E-03	0.82	0.636	3.5E-04	1.47	0.544	9.7E-06	3.68	0.327
Tr x Si	1	3.7E-03	5.84	<b>0.018</b>	5.3E-06	0.02	0.869	5.7E-06	0.88	0.403
Ti x Si	2	1.8E-03	2.91	<b>0.040</b>	5.2E-04	2.45	0.087	3.2E-06	0.51	0.642
Tr x Ti x Si	1	2.0E-03	3.24	0.079	2.4E-04	1.13	0.284	2.5E-06	0.39	0.575
Residuals	54	6.3E-04			2.1E-04			6.4E-06		

  

b) Pair-wise tests									
Between Treatments within Sites	SFA				$\omega$ -3 PUFA				
	Barcarello		Capo Gallo		Barcarello		Capo Gallo		
Treatments	t	P(perm)	t	P(perm)	t	P(perm)	t	P(perm)	
NAT, TRANSP	2.28	<b>0.031</b>	4.45	<b>0.001</b>	2.95	<b>0.006</b>	3.71	<b>0.004</b>	
Between Times within Sites									
	Barcarello		Capo Gallo		Barcarello		Capo Gallo		
Times	t	P(perm)	t	P(perm)	t	P(perm)	t	P(perm)	
T0, T1	6.59	<b>0.002</b>	2.24	<b>0.045</b>	8.66	<b>0.001</b>	4.83	<b>0.003</b>	
T0, T2	1.75	0.119	0.81	0.457	2.19	0.057	1.09	0.296	
T0, T3	0.13	0.891	-	-	2.15	0.073	-	-	

T0, T4	1.91	0.079	-		2.23	<b>0.047</b>	-	
T1, T2	9.54	<b>0.001</b>	8.13	<b>0.001</b>	10.57	<b>0.001</b>	8.09	<b>0.001</b>
T1, T3	15.62	<b>0.001</b>	-		15.31	<b>0.001</b>	-	
T1, T4	10.60	<b>0.001</b>	-		20.25	<b>0.001</b>	-	
T2, T3	7.43	<b>0.001</b>	-		4.60	<b>0.003</b>	-	
T2, T4	4.06	<b>0.002</b>	-		10.80	<b>0.001</b>	-	
T3, T4	1.62	0.113	-		6.97	<b>0.001</b>	-	

Between Times within Sites and Treatments		MUFA				PUFA			
		Natural		Transplanted		Natural		Transplanted	
Site: Barcarello		t	P(perm)	t	P(perm)	t	P(perm)	t	P(perm)
T0, T1		1.52	0.171	0.78	0.425	3.40	0.010	2.54	0.074
T0, T2		1.82	0.116	0.68	0.461	0.91	0.403	0.15	0.853
T0, T3		2.12	0.093	1.99	0.094	1.64	0.205	3.29	<b>0.021</b>
T0, T4		4.12	<b>0.006</b>	5.15	<b>0.008</b>	4.08	<b>0.012</b>	3.48	<b>0.027</b>
T1, T2		7.73	<b>0.012</b>	2.56	<b>0.047</b>	9.51	<b>0.009</b>	5.06	<b>0.009</b>
T1, T3		9.36	<b>0.021</b>	4.27	<b>0.008</b>	12.66	<b>0.008</b>	10.98	<b>0.007</b>
T1, T4		9.38	<b>0.009</b>	8.63	<b>0.011</b>	16.27	<b>0.014</b>	9.04	<b>0.010</b>
T2, T3		0.53	0.563	2.93	<b>0.024</b>	1.79	0.116	7.30	<b>0.010</b>
T2, T4		3.85	<b>0.018</b>	9.24	<b>0.006</b>	7.00	<b>0.006</b>	6.14	<b>0.007</b>
T3, T4		3.62	<b>0.012</b>	5.83	<b>0.010</b>	6.28	<b>0.006</b>	1.48	0.162
Site: Capo Gallo		t	P(perm)	t	P(perm)	t	P(perm)	t	P(perm)
T0, T1		0.44	0.710	0.01	1.000	1.31	0.269	0.09	0.877
T0, T2		0.02	0.994	2.59	0.055	0.66	0.560	4.81	<b>0.010</b>
T1, T2		0.40	0.684	1.95	0.081	2.67	<b>0.027</b>	5.25	<b>0.007</b>

Between Treatments within Sites and Times		Barcarello		Capo Gallo		Barcarello		Capo Gallo	
		t	P(perm)	t	P(perm)	t	P(perm)	t	P(perm)
NAT, TRANSP	T1	1.06	0.299	0.27	0.860	1.31	0.235	1.26	0.260
NAT, TRANSP	T2	2.66	<b>0.024</b>	2.45	0.078	1.69	0.120	5.04	<b>0.006</b>
NAT, TRANSP	T3	0.14	0.841	-		4.59	<b>0.009</b>	-	
NAT, TRANSP	T4	1.69	0.118	-		0.19	0.836	-	

Between Times		$\omega$ -6 PUFA		BAFA	
		t	P(perm)	t	P(perm)
T0, T1		123.40	<b>0.006</b>	2.59	0.234
T0, T2		3.71	0.167	6.00	0.098
T0, T3		7.35	<b>0.001</b>	6.28	<b>0.001</b>

T0, T4	4.58	<b>0.002</b>	6.36	<b>0.001</b>
T1, T2	2.48	0.259	8.32	0.077
T1, T3	0.85	0.425	12.95	<b>0.001</b>
T1, T4	2.42	<b>0.027</b>	11.18	<b>0.001</b>
T2, T3	1.92	0.061	1.75	0.092
T2, T4	0.20	0.839	2.54	<b>0.020</b>
T3, T4	1.78	0.088	1.10	0.297

<b>Between treatments</b>	<b>t</b>	<b>P(perm)</b>
NAT, TRANSP	10.30	<b>0.004</b>

---