

SUPPLEMENTARY MATERIAL

Table 1S. Meteorological data of the last 10 years (annual data and data from the collection month (October) for the plain and mountain areas of the study.

Parameters	Plain		Mountain	
	Annual	October	Annual	October
Average daily maximum temperature (°C)	26.2	29.0	18.18	20.0
Average daily temperature (°C)	19.7	22.3	14.13	16.0
Average daily minimum temperature (°C)	13.2	15.6	9.38	11.0
Precipitation (mm)	342.2	17.4	411.0	23.2
Average raining days (rain of ≥ 0.2 mm)	63.4	4.2	68.0	4.0
Humidity (%)	66.0	64.0	67.4	62.0
Average daily sunshine (h)	9.1	8.9	7.4	7.1
Average daily evaporation (mm)	5.4	6.4	3.8	3.2
Photosynthetic active radiation (PAR; E MJ ⁻¹) ^Y	1.919	1.945	nr	nr

Meteorological data were obtained by the Department of Meteorology of Cyprus

^Y Data are referring to 1997-2000 period according to Jacovides et al. [137]; nr: no records

Table 2S. Correlations coefficients and (*p*-values) between the antioxidant activity and essential oils components of artemisia.

Artemisia			Phen ols	DP PH	FRA P	Flavon oids	Flavan ols	EO	1,8 Cine	Cam phor	Bor neol	<i>cis</i> - Dihyd	Silphip erfol-5-
Plain	Pheno	r	1	0.581	0.18	0.549	0.900*	-	0.24	0.138	0.89	0.994	-0.533
	ls	P		0.226	0.72	0.259	0.014	0.69	0.84	0.912	0.29	0.071	0.642
	DPPH	r		1	0.17	0.947**	0.214	-	-	-0.321	1.00	0.938	-0.097
		p			0.73	0.004	0.684	0.99	0.86	0.792	0.00	0.225	0.938
	FRAP	r			1	0.423	0.301	-	0.25	0.147	0.89	0.993	-0.540
		p				0.403	0.563	0.68	0.83	0.906	0.30	0.077	0.636
	Flavo	r				1	0.222	-	0.17	0.068	0.92	0.999*	-0.472
	noids	P					0.673	0.73	0.88	0.957	0.25	0.026	0.687
	Flava	r					1	-	0.25	0.146	0.89	0.993	-0.540
	nols	P						0.68	0.83	0.907	0.30	0.076	0.637
EO	r						1	-	-0.942	-	-0.360	0.997	
	p							0.14	0.218	0.99	0.765	0.052	
Mount ain	Pheno	r	1	0.958**	0.975**	0.671	0.038	-	0.01	-0.003	0.00	-0.016	-0.016
	ls	P		0.003	0.00	0.145	0.943	0.88	0.99	0.998	0.99	0.990	0.990
	DPPH	r		1	0.927**	0.475	0.262	-	-	0.329	0.33	0.316	0.316
		p			0.00	0.341	0.616	0.67	0.79	0.787	0.78	0.795	0.795
	FRAP	r			1	0.759	0.003	0.00	0.19	-0.183	-	-0.196	-0.196
		p				0.080	0.996	0.99	0.87	0.883	0.88	0.874	0.874
	Flavo	r				1	-0.381	0.72	0.83	-0.832	-	-0.839	-0.839
	noids	P					0.456	0.48	0.36	0.375	0.38	0.366	0.366
	Flava	r					1	-	-	0.833	0.82	0.840	0.840
	nols	P						0.48	0.36	0.373	0.38	0.365	0.365
EO	r						1	0.98	-0.984	-	-0.982	-0.982	
	p							0.12	0.112	0.10	0.121	0.121	

Statistically significant correlations are shown in bold letter (* for $p < 0.05$, ** for $p < 0.01$).

Table 3S. Correlations coefficients and (*p*-values) between the antioxidant activity and essential oils components of pelargonium.

Pelargonium			Phen ols	DPP H	FRA P	Flavon oids	Flava nols	EO	Isoment hone	Citron ellol	Gera niol	Citron ellyl	γ - Eude
Plain	phen	r	1	0.91	0.70	0.864*	0.899*	-	-0.715	-0.985	0.937	-0.951	0.297
	ols	P		0.01	0.12	0.026	0.015	0.94	0.492	0.109	0.228	0.200	0.808
	DPP	r		1	0.65	0.755	0.807	0.92	-0.877	-0.451	0.609	-0.573	-0.827
	H	P			0.15	0.083	0.052	0.24	0.319	0.702	0.583	0.612	0.380
	FRA	r			1	0.914*	0.936**	-	0.747	0.239	-0.415	0.374	0.932
	P	P				0.011	0.006	0.10	0.463	0.846	0.728	0.756	0.236
	Flavo	r				1	0.962**	-	-0.124	-0.664	0.514	-0.552	0.827
	noids	P					0.002	0.51	0.921	0.538	0.656	0.628	0.380
	Flava	r					1	-	0.261	-0.331	0.151	-0.195	0.978
	nols	P						0.26	0.832	0.785	0.904	0.875	0.132
	EO	r						1	-0.632	-0.082	0.265	-0.222	-0.978
		p							0.565	0.948	0.829	0.858	0.135
		r		1	0.92	0.96	0.842*	0.991**	0.99	-0.574	-0.574	0.994	0.590

Moun tain	phen	p	0.00	0.00	0.035	0.000	0.04	0.611	0.611	0.069	0.599	0.595
	DPP	r	1	0.85	0.751	0.960**	0.74	-0.956	-0.956	0.718	0.961	0.963
	H	p		0.03	0.086	0.002	0.46	0.190	0.190	0.491	0.177	0.174
	FRA	r		1	0.882*	0.939**	0.98	-0.348	-0.348	0.989	0.366	0.372
	P	p			0.020	0.005	0.12	0.774	0.774	0.093	0.761	0.758
	Flavo	r			1	0.801	-	0.271	0.271	-0.974	-0.289	-0.295
	noids	P				0.055	0.17	0.825	0.825	0.145	0.813	0.809
	Flava	r				1	0.95	-0.746	-0.746	0.943	0.759	0.763
	nols	P					0.19	0.464	0.464	0.217	0.451	0.448
	EO	r					1	-0.518	-0.517	0.999*	0.534	0.539
	p						0.654	0.654	0.026	0.642	0.638	

Statistically significant correlations are shown in bold letter (* for $p < 0.05$, ** for $p < 0.01$).

Table 4S. Correlations coefficients and (p -values) between the antioxidant activity and essential oils components of laurel.

Laurel		Phen ols	DP PH	FR AP	Flavon oids	Flava nols	EO	α - Pine	Sabin ene	β - Pine	1,8- Cine	Terpi nyl	
Plain	Phenol	r	1	0.90	0.8	0.972**	0.842*	-	0.74	0.802	0.88	-	0.817
	s	p		0.01	0.0	0.001	0.035	0.7	0.46	0.408	0.31	0.260	0.392
	DPPH	r		1	0.7	0.901*	0.962**	-	0.93	0.967	0.99	-	0.973
		p			0.0	0.014	0.002	0.9	0.22	0.164	0.06	0.016	0.148
	FRAP	r			1	0.839*	0.840*	0.0	0.96	0.986	1.00	-	0.990
		p				0.037	0.036	0.9	0.16	0.107	0.00	0.041	0.091
	Flavon	r				1	0.817*	-	0.62	0.696	0.79	-	0.714
	oids	p					0.047	0.6	0.57	0.510	0.41	0.362	0.494
	Flavan	r					1	0.3	1.00	0.994	0.96	-	0.991
	ols	p						0.7	0.00	0.069	0.16	0.217	0.085
EO	r						1	0.31	0.217	0.06	0.014	0.192	
	p							0.79	0.861	0.95	0.991	0.877	
Moun tain	Phenol	r	1	0.96	0.8	0.736	0.745	-	0.86	0.871	0.95	0.895	0.465
	s	p		0.00	0.0	0.095	0.089	0.5	0.34	0.328	0.18	0.294	0.692
	DPPH	r		1	0.7	0.789	0.741	-	0.91	0.803	0.98	0.943	0.571
		p			0.0	0.062	0.092	0.4	0.26	0.406	0.10	0.215	0.613
	FRAP	r			1	0.862*	0.918**	-	0.94	0.763	0.99	0.963	0.622
		p				0.027	0.010	0.3	0.22	0.447	0.06	0.174	0.572
	Flavon	r				1	0.940**	-	0.99	0.603	0.99	0.999	0.779
	oids	p					0.005	0.2	0.08	0.588	0.07	0.034	0.431
	Flavan	r					1	-	0.87	0.857	0.96	0.906	0.488
	ols	p						0.5	0.32	0.344	0.16	0.278	0.675
EO	r						1	-	-0.239	-	-	-0.963	
	p							0.17	0.846	0.33	0.224	0.173	

Statistically significant correlations are shown in bold letter (* for $p < 0.05$, ** for $p < 0.01$).

Table 5S. Correlations coefficients and (p -values) between the antioxidant activity and essential oils components of lavender.

Lavender		Phenols	DP PH	FR AP	Flavonoids	Flavanols	EO	1,8 Cine	Linalool	Campor	Borneol	Carvone	
Plain	Phenols	r	1	0.92	0.91	0.942**	0.318	0.9	-	0.843	-0.966	0.775	0.192
	s	p		0.00	0.01	0.005	0.539	0.0	0.576	0.362	0.167	0.435	0.877
	DPPH	r		1	0.78	0.881*	0.435	0.4	-	0.782	-0.068	0.849	-
		p			0.06	0.020	0.389	0.7	0.214	0.428	0.957	0.355	0.333
	FRAP	r			1	0.971**	-0.030	-	0.816	-	-0.211	-	0.971
		p				0.001	0.955	0.8	0.392	0.607	0.864	0.533	0.154
	Flavonoids	r				1	0.098	-	1.000	-	0.371	-	0.671
		p					0.853	0.5	0.015	0.230	0.758	0.156	0.532
	Flavanols	r					1	0.8	-	0.989	-0.558	0.999	-
		p						0.3	0.120	0.095	0.623	0.021	0.667
EO	r						1	-	0.906	-0.923	0.852	0.061	
	p							0.492	0.278	0.251	0.351	0.961	
Mountain	Phenols	r	1	0.99	0.91	0.984**	-0.238	0.6	0.846	0.118	0.874	0.885	-
	s	p		0.00	0.00	0.000	0.650	0.5	0.358	0.925	0.324	0.308	0.249
	DPPH	r		1	0.92	0.977**	-0.192	0.7	0.797	0.203	0.828	0.922	-
		p			0.00	0.001	0.715	0.4	0.413	0.870	0.379	0.253	0.194
	FRAP	r			1	0.973**	-0.209	0.9	-	0.961	-0.109	0.773	-
		p				0.001	0.690	0.2	0.896	0.179	0.931	0.438	0.497
	Flavonoids	r				1	-0.270	0.8	0.624	0.437	0.665	0.989	-
		p					0.604	0.2	0.571	0.712	0.537	0.095	0.036
	Flavanols	r					1	-	-	-	-0.782	-	0.974
		p						0.4	0.463	0.821	0.428	0.204	0.144
EO	r						1	0.204	0.796	0.257	0.950	-	
	p							0.869	0.414	0.834	0.203	0.262	

Statistically significant correlations are shown in bold letter (* for $p < 0.05$, ** for $p < 0.01$).

Table 6S. Correlations coefficients and (p -values) between the antioxidant activity and essential oils components of lemon verbena.

Lemon verbena		Phe nols	DP PH	FR AP	Flavo noids	Flava nols	EO	D- Limo	1,8- Cine	Ner al	Gera nial	Caryoph yllene	
Plain	Pheno ls	r	1	0.90	0.7	0.944**	0.634	-	-0.499	0.41	-	-	-0.172
		p		0.01	0.0	0.005	0.176	0.5	0.667	0.72	0.0	0.061	0.890
	DPPH	r		1	0.9	0.963**	0.680	-	-0.558	0.34	-	-	-0.103
		p			0.0	0.002	0.137	0.5	0.623	0.77	0.0	0.106	0.934
	FRAP	r			1	0.884*	0.515	-	-0.916	-	-	-	0.447
		p				0.020	0.296	0.1	0.262	0.86	0.3	0.466	0.705
	Flavo noids	r				1	0.755	-	-0.573	0.33	-	-	-0.085
		p					0.082	0.4	0.611	0.78	0.0	0.117	0.946
	Flavan ols	r					1	-	-0.091	0.75	-	-	-0.568
		p						0.8	0.942	0.45	0.3	0.213	0.615
EO	r						1	0.982	0.41	0.7	0.580	-0.631	
	p							0.123	0.72	0.4	0.606	0.565	
Mou ntain	Pheno ls	r	1	0.35	0.9	0.800	0.207	-	-0.986	0.98	-	-	-0.986
		p		0.48	0.0	0.056	0.693	0.3	0.105	0.10	0.1	0.106	0.106
		r		1	0.4	0.644	-0.644	-	-0.542	0.54	-	-	-0.544

DPPH	p		0.3	0.168	0.168	0.4	0.635	0.63	0.6	0.635	0.634
FRAP	r		1	0.902*	0.175	-	-	0.99	-	-	-0.998*
	p			0.014	0.740	0.2	0.042	0.04	0.0	0.042	0.043
Flavonoids	r			1	0.040	-	-0.972	0.97	-	-	-0.972
Flavonols	p				0.941	0.0	0.151	0.15	0.1	0.151	0.150
Flavanols	r				1	0.3	0.000	0.00	0.0	0.000	0.002
	p					0.7	1.000	1.00	1.0	1.000	0.999
EO	r					1	0.942	-	0.9	0.942	0.943
	p						0.217	0.21	0.2	0.217	0.216

Statistically significant correlations are shown in bold letter (* for $p < 0.05$, ** for $p < 0.01$).

Table 7S. Correlations coefficients and (p -values) between the antioxidant activity and essential oils components of rosemary.

Rosemary		Phenols	DPPH	FRAP	Flavonoids	Flavonols	EO	α -Pine	Camp hene	1,8-Cine	Camp hor	Borneo	
Plai n	Phenols	r	1	0.67	0.92	0.896*	0.414	0.81	-	-0.897	-0.894	0.997*	0.988
		p		0.14	0.00	0.016	0.415	0.39	0.01	0.292	0.295	0.049	0.098
	DPPH	r		1	0.51	0.598	0.290	0.94	-	-0.888	-0.169	0.528	0.461
	H	p			0.29	0.210	0.577	0.20	0.58	0.304	0.892	0.646	0.695
	FRA	r			1	0.985**	0.096	0.36	-	-0.500	-0.992	0.872	0.907
	P	p				0.000	0.856	0.76	0.38	0.667	0.080	0.326	0.277
	Flavonoids	r				1	0.021	0.53	-	-0.655	-	0.949	0.971
	Flavonols	p					0.968	0.64	0.26	0.545	0.042	0.204	0.155
	EO	r					1	0.88	-	-0.948	-0.827	0.978	0.959
		p						0.30	0.07	0.207	0.380	0.134	0.183
Moun tai n	Phenols	r	1	0.97	0.95	0.930**	-0.212	0.99	0.76	0.077	-0.996	-0.434	-
		p		0.00	0.00	0.007	0.687	0.06	0.44	0.951	0.053	0.714	0.003
	DPPH	r		1	0.91	0.984**	-0.275	0.98	0.70	-0.015	-0.985	-0.349	-0.995
	H	p			0.01	0.000	0.599	0.11	0.50	0.990	0.112	0.773	0.062
	FRA	r			1	0.861*	-0.116	0.99	0.88	0.275	-0.993	-0.605	-0.981
	P	p				0.028	0.827	0.06	0.31	0.823	0.075	0.586	0.125
	Flavonoids	r				1	-0.394	0.99	0.76	0.064	-0.995	-0.422	-1.000*
	Flavonols	p					0.440	0.06	0.45	0.959	0.062	0.723	0.012
	EO	r					1	-	-	-0.806	0.714	0.966	0.656
		p						0.48	0.10	0.403	0.494	0.167	0.544
	r						1	0.82	0.170	-	-0.516	-0.996	
	p							0.38	0.891	0.006	0.655	0.056	

Statistically significant correlations are shown in bold letter (* for $p < 0.05$, ** for $p < 0.01$).

Table 8S. Correlations coefficients and (p -values) between the antioxidant activity and essential oils components of sage.

Sage		Phenols	DPH	FRAP	Flavonoids	Flavonols	EO	1,8-Cine	α -Thuj	β -Thuj	Camp hor	Borneo
	r	1	0.34	0.91	0.911*	0.207	-	0.759	0.408	0.298	-0.797	-

Plain	Phenol	p		0.50	0.01	0.012	0.694	0.2	0.452	0.732	0.807	0.413	0.671
	DPPH	r	1	0.30	0.194	0.082	0.7	-	-	-	-	0.883	0.996
		p		0.56	0.713	0.877	0.4	0.273	0.008	0.083	0.311	0.054	
	FRAP	r		1	0.972**	0.453	-	0.718	0.353	0.240	-0.759	-	
		p			0.001	0.367	0.3	0.490	0.771	0.846	0.452	0.709	
	Flavon	r			1	0.534	-	0.863	0.565	0.463	-0.892	-	
	oids	p				0.276	0.1	0.338	0.618	0.693	0.299	0.557	
	Flavan	r				1	-	0.715	0.945	0.977	-0.672	-	
	ols	p					0.6	0.493	0.212	0.137	0.531	0.274	
	EO	r					1	-	-	-	0.977	0.815	
	p						0.174	0.454	0.530	0.136	0.393		
Moun tain	Phenol	r	1	0.73	0.97	0.860*	0.175	0.6	-	-	-	0.671	0.864
	s	p		0.09	0.00	0.028	0.741	0.5	0.692	0.430	0.480	0.531	0.336
	DPPH	r		1	0.76	0.672	0.115	0.8	-	-	-	0.848	0.694
		p			0.07	0.143	0.828	0.3	0.867	0.606	0.304	0.356	0.512
	FRAP	r			1	0.883*	0.228	0.8	-	-	-	0.860	0.677
		p				0.020	0.665	0.3	0.882	0.620	0.289	0.341	0.527
	Flavon	r				1	-0.239	0.5	-	-	-	0.571	0.921
	oids	p					0.648	0.6	0.610	0.348	0.562	0.613	0.254
	Flavan	r					1	0.3	0.997	0.943	-	0.274	-
	ols	p						0.7	0.046	0.216	0.875	0.823	0.309
EO	r						1	0.378	-	-	0.999*	0.169	
	p							0.753	0.985	0.076	0.024	0.892	

Statistically significant correlations are shown in bold letter (* for $p < 0.05$, ** for $p < 0.01$).

Table 9S. Correlations coefficients and (p -values) between the antioxidant activity and essential oils components of spearmint.

Spearmint		Phe nols	DP PH	FR AP	Flavo noids	Flava nols	EO	D- limo	1,8- Cin	cis- dihy	Carv one	Dihydro carveol
Plain	Pheno	r	1	0.8	0.9	0.779	0.515	-	-0.469	0.37	-	0.358
	ls	p		0.0	0.0	0.121	0.296	0.8	0.689	0.75	0.55	0.922
	DPPH	r		1	0.8	0.536	0.565	-	-0.871	-	-	0.432
		p			0.0	0.352	0.243	0.4	0.327	0.88	0.91	0.716
	FRAP	r			1	0.580	0.323	-	-0.330	0.51	-	0.495
		p				0.306	0.533	0.9	0.786	0.65	0.45	0.825
	Flavo	r				1	0.011	-	-0.529	0.31	-	0.292
	noids	p					0.986	0.7	0.645	0.80	0.59	0.966
	Flava	r					1	-	-0.806	-	-	0.320
	nols	p						0.5	0.404	0.95	0.83	0.793
EO	r						1	0.975	0.79	-	0.807	
	p							0.142	0.41	0.61	0.247	
Mou ntain	Pheno	r	1	0.6	0.8	0.940**	0.811	0.0	-0.496	0.83	0.47	-0.109
	ls	p		0.1	0.0	0.005	0.050	0.9	0.670	0.37	0.68	0.930
	DPPH	r		1	0.7	0.834*	0.811	0.7	0.317	0.96	-	0.139
		p			0.0	0.039	0.050	0.4	0.795	0.16	0.77	0.911
	FRAP	r			1	0.978**	0.715	0.1	-0.350	0.91	0.32	-
		p				0.001	0.110	0.8	0.772	0.27	0.78	0.656
	r				1	0.828*	0.2	-0.312	0.92	0.28	-	0.092

Flavo	p	0.042	0.8	0.798	0.24	0.81	0.681	0.941
Flava	r	1	0.5	0.030	0.99	-	-	0.426
nols	p		0.6	0.981	0.02	0.96	0.903	0.720
EO	r		1	0.858	0.57	-	0.750	0.992
	p			0.344	0.61	0.32	0.460	0.083

Statistically significant correlations are shown in bold letter (* for $p < 0.05$, ** for $p < 0.01$).