

	UV-A	UV-B	UV-B _{BE}	UV _{BE}	F _i /F _m	SI	Chl a + b	Chl a/b	Xanthophyll Index	Total carotenoids	Growth	SUVAC	Apigenin 7-O-glucuronide	Luteolin 3'-O-glucuronide	Luteolin 4'-O-glucuronide	Luteolin 7-O-glucuronide	Apigenin 7,4'-diglucuronide	Luteolin 7,3'-diglucuronide	Apigenin	Luteolin	IUVAC	p-Coumaric acid	Ferulic acid	CHS expression	
PAR	-0.414	-0.414	-0.414	-0.500	-0.488	-0.515	-0.849	-0.451	0.902	-0.797	-0.889	-0.072	-0.241	-0.215	-0.186	0.044	-0.249	0.136	-0.247	-0.187	-0.038	0.801	0.714	-0.186	
UV-A		0.281	0.267	0.577	-0.460	0.421	0.082	-0.401	-0.538	0.104	0.490	-0.300	0.401	0.029	0.396	0.437	0.359	-0.015	-0.565	-0.401	-0.495	-0.709	-0.707	0.669	
UV-B			1.000	0.965	0.364	0.983	0.067	0.415	-0.660	-0.023	0.235	0.816	0.505	0.508	0.515	0.787	0.508	0.840	-0.328	-0.531	-0.674	-0.661	-0.719	0.747	
UV-B _{BE}				0.951	0.381	0.980	0.068	0.432	-0.661	-0.025	0.237	0.822	0.510	0.505	0.515	0.778	0.505	0.841	-0.323	-0.531	-0.672	-0.658	-0.716	0.735	
UV _{BE}					0.174	0.976	0.083	0.241	-0.758	0.011	0.387	0.587	0.505	0.823	0.505	0.803	0.505	0.703	-0.481	-0.601	-0.751	-0.816	-0.865	0.847	
F _i /F _m						0.284	0.419	0.987	-0.493	0.303	0.451	0.501	0.070	0.409	0.022	-0.258	0.131	0.149	0.346	0.080	0.053	-0.295	-0.269	-0.333	
SI							0.168	0.326	-0.728	0.090	0.322	0.721	0.505	0.899	0.505	0.790	0.505	0.758	-0.314	-0.479	-0.642	-0.740	-0.782	0.809	
Chl a + b								0.307	-0.543	0.991	0.624	-0.041	-0.091	-0.055	-0.138	-0.326	-0.090	-0.380	0.703	0.674	0.543	-0.371	-0.243	-0.100	
Chl a/b									-0.524	0.182	0.466	0.512	0.127	0.453	0.080	-0.194	0.191	0.213	0.193	-0.075	-0.091	-0.354	-0.346	-0.285	
Xanthophyll Index										-0.459	-0.883	-0.236	-0.504	-0.459	-0.454	-0.226	-0.519	-0.159	0.154	0.252	0.389	0.687	0.676	-0.391	
Total carotenoids											0.565	-0.127	-0.151	-0.147	-0.192	-0.347	-0.157	-0.447	0.727	0.734	0.607	-0.299	-0.166	-0.106	
Growth												-0.190	0.051	0.007	-0.003	-0.213	0.065	-0.304	-0.022	-0.034	-0.112	-0.839	-0.767	0.009	
SUVAC													0.746	0.505	0.739	0.609	0.777	0.891	0.001	-0.278	-0.370	-0.153	-0.219	0.426	
Apigenin 7-O-glucuronide														0.912	0.998	0.515	0.998	0.881	-0.449	-0.590	-0.731	-0.566	-0.640	0.899	
Luteolin 3'-O-glucuronide															0.902	0.770	0.505	0.998	0.893	-0.250	-0.495	-0.611	-0.436	-0.510	0.647
Luteolin 4'-O-glucuronide																0.903	0.998	0.893	-0.469	-0.601	-0.737	-0.524	-0.604	0.910	
Luteolin 7-O-glucuronide																	0.917	0.860	-0.559	-0.624	-0.734	-0.350	-0.444	0.845	
Apigenin 7,4'-diglucuronide																		0.895	-0.440	-0.598	-0.736	-0.570	-0.645	0.868	
Luteolin 7,3'-diglucuronide																			-0.410	-0.611	-0.684	-0.197	-0.305	0.673	
Apigenin																				0.914	0.376	0.485	-0.506		
Luteolin																					0.914	0.426	0.547	-0.511	
IUVAC																						0.552	0.666	-0.656	
p-Coumaric acid																							0.990	-0.520	
Ferulic acid																								-0.579	

Table S1. Correlations between all the radiation levels applied in the experiment and the physiological variables measured (see Materials and methods for details). Significant correlations are indicated in different colors depending on the significance level: deep green, $p < 0.001$; medium green, $p < 0.01$; light green, $p < 0.05$.