

Supplementary data

Table S1. The correlation matrix (Pearson (n)) between photosynthetic indices, metabolites and growth indices in lettuce.

Variables	Pr															
Tr	0.788	Tr														
gs	0.789	0.977	gs													
Ci	-0.556	0.029	-0.040	Ci												
Ci,Ca	-0.483	0.153	0.116	0.940	Ci/Ca											
LUE	1.000	0.788	0.789	-0.556	-0.483	LUE										
WUE	0.522	-0.073	-0.102	-0.855	-0.946	0.522	WUE									
Fv/Fm	-0.112	-0.544	-0.586	-0.430	-0.541	-0.112	0.580	Fv/Fm								
FPSII	-0.042	-0.291	-0.397	-0.051	-0.348	-0.042	0.470	0.605	FPSII							
NPQ	0.033	-0.179	-0.089	-0.530	-0.277	0.033	0.167	0.265	-0.528	NPQ						
PRI	0.052	0.231	0.270	0.165	0.271	0.052	-0.335	-0.529	-0.629	0.102	PRI					
PSRI	0.114	-0.316	-0.251	-0.490	-0.598	0.114	0.477	0.517	0.398	0.148	-0.116	PSRI				
CRI2	-0.204	-0.160	-0.226	0.179	0.079	-0.204	0.028	0.345	0.495	-0.260	-0.858	-0.231	CRI2			
ARI1	-0.337	-0.336	-0.402	0.215	0.065	-0.337	0.030	0.522	0.589	-0.254	-0.774	-0.052	0.931	ARI1		
NDVI	-0.138	0.226	0.145	0.439	0.506	-0.138	-0.356	-0.295	-0.154	-0.185	-0.286	-0.901	0.605	0.397	NDVI	
DM	0.102	-0.187	-0.250	-0.217	-0.352	0.102	0.422	0.628	0.495	0.044	-0.003	0.720	-0.245	-0.011	-0.693	DM
LA	0.152	-0.186	-0.280	-0.317	-0.445	0.152	0.565	0.554	0.430	0.118	0.084	0.478	-0.322	-0.144	-0.537	0.865
Fru	0.803	0.574	0.627	-0.590	-0.455	0.803	0.408	0.054	-0.180	0.237	0.065	0.232	-0.298	-0.380	-0.267	0.188
Glu	0.713	0.791	0.862	-0.216	-0.052	0.713	-0.011	-0.644	-0.507	-0.009	0.385	-0.142	-0.482	-0.673	-0.040	-0.282
Suc	0.020	-0.321	-0.387	-0.293	-0.422	0.020	0.480	0.665	0.421	0.103	0.172	0.506	-0.335	-0.078	-0.602	0.842
Raf	-0.762	-0.798	-0.875	0.257	0.117	-0.762	-0.046	0.544	0.364	0.053	-0.103	0.070	0.212	0.439	-0.029	0.312
Hex/Suc	0.252	0.574	0.647	0.171	0.346	0.252	-0.408	-0.828	-0.583	-0.071	0.091	-0.510	0.004	-0.280	0.475	-0.785

Values in bold are different from 0 with a significance level alpha=0.95. Pr – photosynthetic rate, gs – stomatal conductance, C_i – intracellular CO₂ content. C_i/C_a – ratio between intracellular and ambient CO₂ content, Tr – transpiration rate, WUE – water use efficiency, LUE – light use efficiency,). Fv/Fm – maximum quantum yield of PSII photochemistry of dark adapted plants; Φ_{PSII} – actual quantum yield of PSII photochemistry of light adapted plants, NPQ - non-photochemical fluorescence quenching, PRI - photochemical reflectance indice, CRI – carotenoids/chlorophyll ratio, ARI – anthocyanin amount, PSRI – dry or senescent carbon, NDVI – biomass content, DW – dry weight, LA – leaf area, Fru – fructose, Glu – glucose, Suc – sucrose, Raf – raffinose, Hex – sum of hexoses.

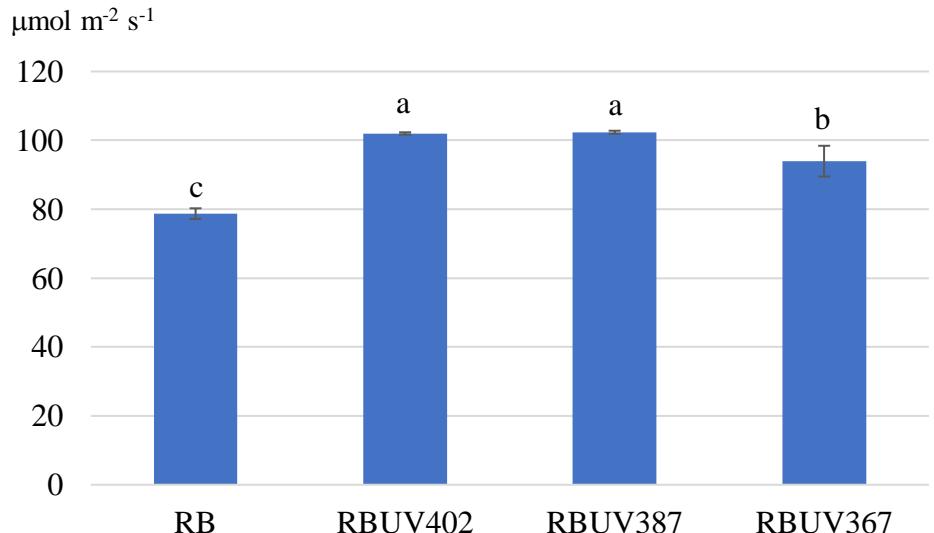


Figure S1. Electron transport rate (ETR) of lettuce subjected to different light qualities.

RB – Red 662 and Blue 452 nm (Control); RBUV402 – Control with UV-A 402 nm; RBUV387 – Control with UV-A 387 nm; RBUV367 – Control with UV-A 367 nm. Total PPFD maintained at $250 \mu\text{mol m}^{-2} \text{s}^{-1}$, changing the input of red 662 nm. The data were processed using XLStat software, the Tukey (HSD) test at the confidence level $p = 0.05$ (biological replicates, $n=5$).