

**Table S1.** The content of identified substances: polyphenols, flavonoids, free amino acids and reducing sugars [mg/gDW].

Light quality	Polyphenols [mg GAE/g DW]	Flavonoids [mg QE/g DW]	Free amino acids [mg Gly/g DW]	Reducing sugars [mg/g DW]
B	37.13±1.94 <sup>bc</sup>	649.78±48.02 <sup>c</sup>	9.24±0.72 <sup>de</sup>	308.52±9.55 <sup>b</sup>
R	30.85±0.42 <sup>a</sup>	515.44±29.52 <sup>ab</sup>	13.44±0.50 <sup>g</sup>	420.55±9.21 <sup>e</sup>
RB	36.92±4.21 <sup>bc</sup>	590.37±53.10 <sup>bc</sup>	8.56±0.39 <sup>d</sup>	361.81±3.38 <sup>c</sup>
RBUV	32.53±1.68 <sup>ab</sup>	493.45±43.81 <sup>a</sup>	5.66±0.29 <sup>b</sup>	329.32±14.17 <sup>b</sup>
RBG	41.87±0.63 <sup>cd</sup>	585.43±36.82 <sup>bc</sup>	6.62±0.26 <sup>c</sup>	420.41±12.08 <sup>e</sup>
RBV	29.71±3.24 <sup>a</sup>	485.56±16.96 <sup>a</sup>	11.22±0.15 <sup>f</sup>	532.51±21.44 <sup>f</sup>
RBfR	41.13±4.44 <sup>cd</sup>	528.97±57.42 <sup>ab</sup>	3.35±0.15 <sup>a</sup>	253.86±12.48 <sup>a</sup>
WLed	41.71±4.05 <sup>cd</sup>	585.20±30.76 <sup>bc</sup>	9.78±0.46 <sup>e</sup>	381.67±27.31 <sup>cd</sup>
Fl	46.65±4.45 <sup>d</sup>	610.02±35.36 <sup>c</sup>	9.18±0.53 <sup>de</sup>	399.75±9.55 <sup>de</sup>

B – 100% blue LED of 430 nm; R – 100% red LED of 670 nm; RB – combination of red (70%) and blue (30%) LED; RBUV – 50% RB and 50% ultraviolet LED of 400 nm; RBG – 50% RB and 50% green LED of 528 nm; RBV – 50% RB and 50% yellow of 600 nm; RBfR – 50% RB and 50% far red of 730 nm; WLed – white LED light composed of 33.3% warm white (2700 K), 33.3% neutral white (4500 K), and 33.3% cool white (5700 K); Fl – control, fluorescence lamps.

Means ± standard deviations (n = 3) within a column followed by the same letter are not significantly different according to Duncan's multiple range test at  $p \leq 0.05$  (different letters indicate significantly different means).