

Figure S1. Leaf number of potato plantlets grown under different monochromatic lights at different stages. R, red light; B, blue light; Y, yellow light; G, green light; W, white light.

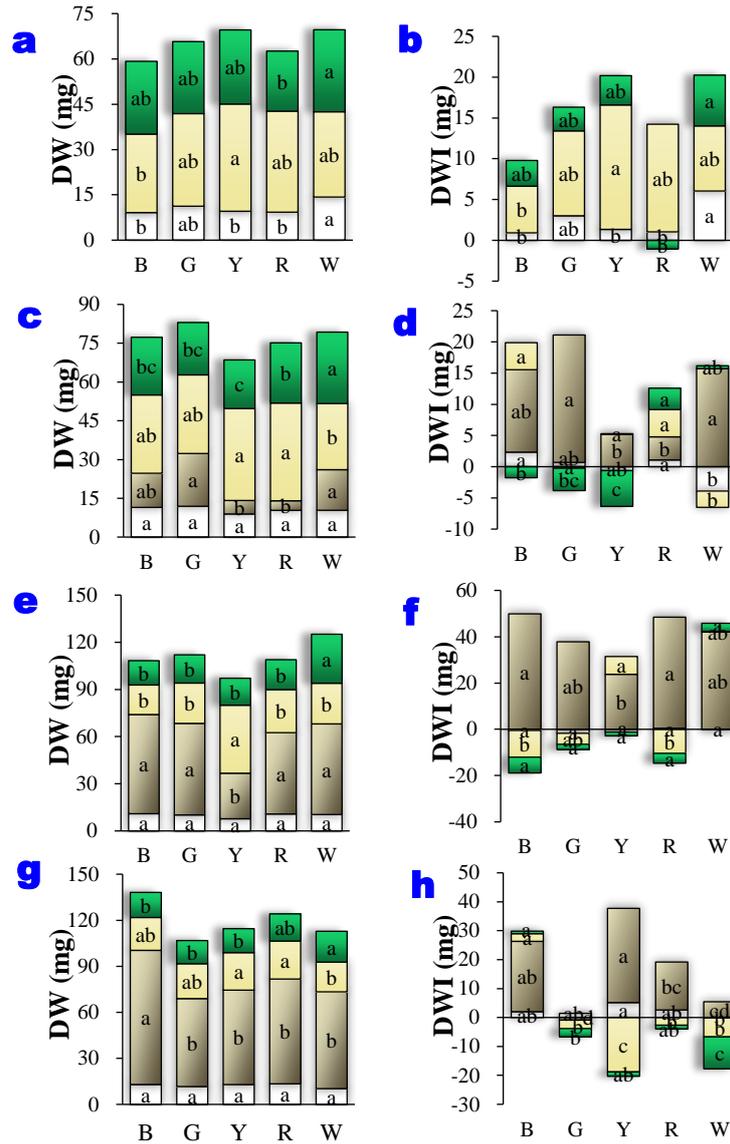


Figure S2. The effects of different lights on the dry matter accumulation in various organs of potato plantlets. Dry weight in different organs at 15 d (a), 30 d (c), 45 d (e), 60 d (g) after light treatment; dry weight increment in different organs during 0-15 d (b), 15-30 d (d), 30-45 d (f), 45-60 d (h) after light treatments. DW, dry weight; DWI, increase in dry weight. Different lowercase letters on the bars indicate statistically significant differences ($P \leq 0.05$). Abbreviations of light treatments were as described in Figure S1.

Table S1. Estimation of the error in measuring solute consumption in the culture medium using the drying and weighing method.

Content (g/L)			Medium (mL)	Dry weight (g)		Relative deviation (%)
Sucrose	Agar	Other nutrient		Theoretical	Measured	
40	8	4.74	10	0.53	0.55	3.77
80	8	4.74	10	0.93	0.97	4.30
120	8	4.74	10	1.33	1.38	3.76
160	8	4.74	10	1.73	1.82	5.20

Table S2. The primer sequences of target and reference genes used in RT-qPCR analysis

Gene name	Forward primer	Reverse primer
<i>StSUT1</i>	TGAACTGGATCGCGTGGTTT	CATAAGTGTGCCGCTGGG
<i>StSUT4</i>	TGTGGACCGCTTTCAGGTTT	ACTGCTCCGGCGACAATAAA
<i>Eflα</i>	ATTGGAAACGGATATGCTCCA	TCCTTACCTGAACGCCTGTCA