

Supplementary Materials

The role of selected wavelengths of light in the activity of photosystem II in *Gloeobacter violaceus*

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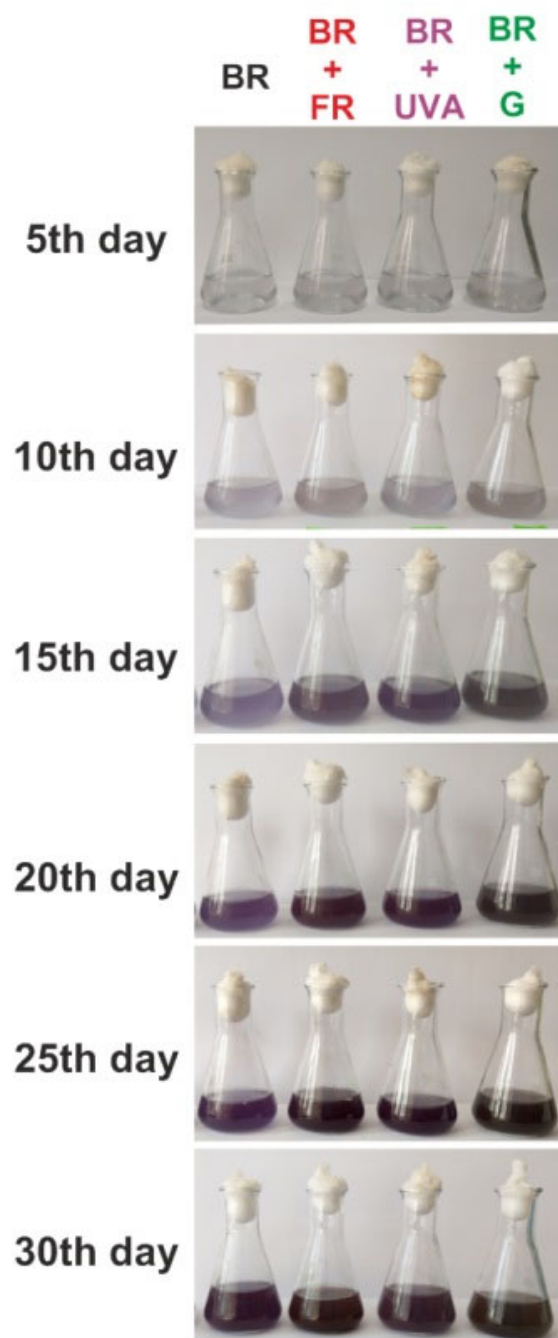


Figure S1. The 30-day growth of the *Gloeobacter violaceus* cultures in Erlenmeyer flasks under different light conditions.

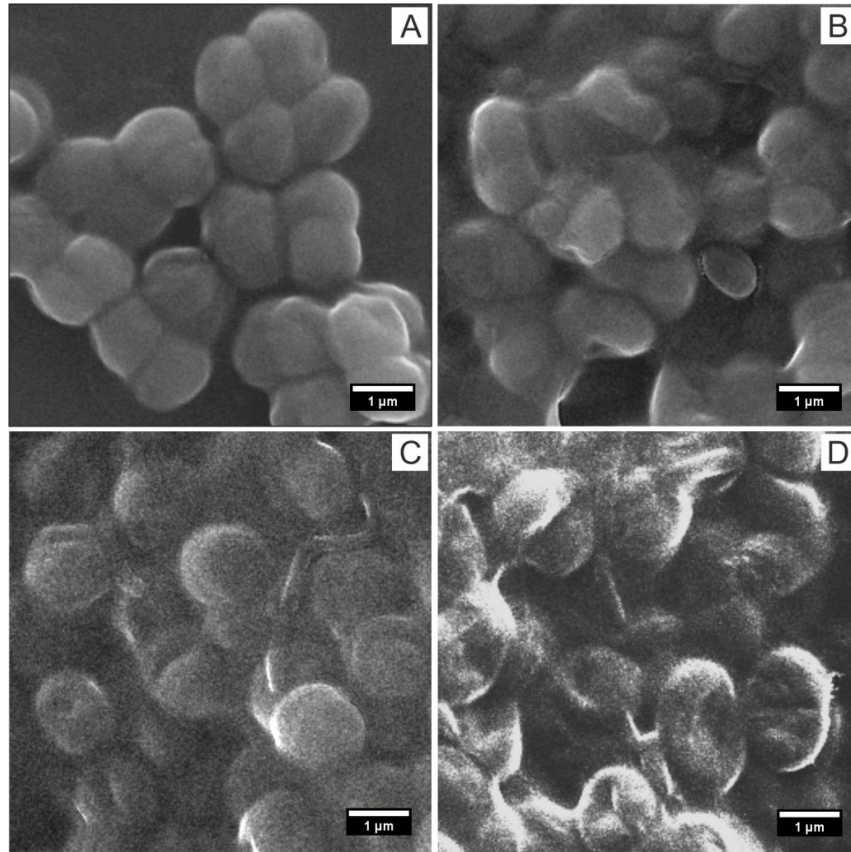


Figure S2. SEM overview of *Gloeobacter violaceus* culture grown under BR light (A), BR + FR light (B), BR + UVA light (C), and BR + G light (D).

Table S1. Chlorophyll *a* fluorescence parameters of *Gloeobacter violaceus* from different spectral compositions of light and days of culture. The data presented are the average values from 8 independent repetitions for each object. The values marked with different letters are significantly different according to light conditions using a one-way ANOVA and Tukey's HSD test procedure at the level of significance $p \leq 0.05$.

Parameter	Spectral composition of light											
	BR	BR +FR	BR + UVA	BR + G	BR	BR + FR	BR + UVA	BR + G	BR	BR + FR	BR + UVA	BR + G
	10th days of culture				25th days of culture				30th days of culture			
Fo/Fm	0.605 ^b	0.598 ^b	0.566 ^c	0.680 ^a	0.772 ^d	1.140 ^c	1.239 ^b	1.329 ^a	0.973 ^c	2.032 ^a	1.716 ^b	1.810 ^b
Fv/Fm	0.171 ^a	0.126 ^c	0.158 ^b	0.137 ^c	0.173 ^b	0.072 ^c	0.208 ^a	0.046 ^c	0.217 ^a	0.025 ^b	0.380 ^a	0.260 ^a
Fv/Fo	0.219 ^a	0.153 ^b	0.203 ^a	0.165 ^b	0.212 ^a	0.076 ^b	0.244 ^a	0.048 ^b	0.266 ^a	0.026 ^b	0.487 ^a	0.328 ^a
Vj	0.558 ^{ab}	0.534 ^b	0.506 ^c	0.596 ^a	0.623 ^b	1.060 ^a	1.072 ^a	1.128 ^a	0.783 ^b	1.587 ^a	1.282 ^a	1.349 ^a
ABS/RC	8.15 ^c	9.36 ^b	7.53 ^c	10.84 ^a	11.25 ^d	42.79 ^b	21.65 ^c	60.79 ^a	13.58 ^b	47.60 ^a	26.53 ^b	75.22 ^a
Dio/RC	6.36 ^c	7.73 ^b	5.90 ^c	9.03 ^a	9.19 ^c	40.26 ^b	18.57 ^c	57.61 ^a	11.11 ^b	47.36 ^a	22.46 ^b	71.67 ^a
TRo/RC	1.79 ^a	1.63 ^b	1.63 ^b	1.81 ^a	2.06 ^c	2.53 ^b	3.08 ^a	3.18 ^a	2.47 ^c	5.24 ^a	4.06 ^b	3.54 ^b
ETo/RC	0.501 ^a	0.430 ^a	0.493 ^a	0.490 ^a	0.702 ^a	0.316 ^b	0.798 ^a	0.693 ^a	0.847 ^b	1.301 ^a	1.522 ^a	1.175 ^a
M0	1.29 ^{ab}	1.20 ^b	1.14 ^{bc}	1.32 ^a	1.36 ^c	2.21 ^b	2.28 ^{ab}	2.60 ^a	1.62 ^b	3.94 ^a	2.54 ^b	2.37 ^b
ψEo	0.217 ^a	0.191 ^a	0.219 ^a	0.221 ^a	0.32 ^b	0.152 ^c	0.406 ^a	0.292 ^b	0.407 ^b	0.470 ^b	0.814 ^a	0.721 ^a
φEo	0.048 ^a	0.033 ^b	0.048 ^a	0.037 ^b	0.059 ^a	0.009 ^b	0.055 ^a	0.006 ^b	0.075 ^b	0.052 ^b	0.175 ^a	0.144 ^a