

Supplementary materials

An alternative exploitation of *Synechocystis* sp. PCC6803: a cascade approach for the recovery of high added-value products

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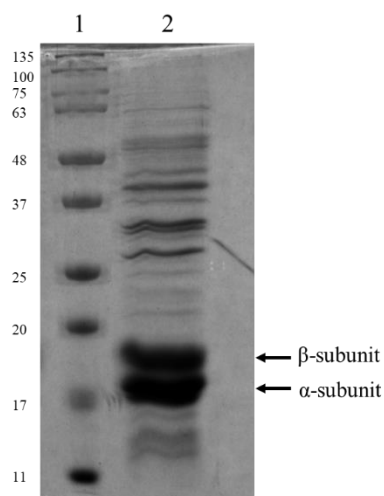


Figure S1. Protein extraction from *Synechocystis* sp. PCC6803. SDS-PAGE analysis of protein extract after sonication. Lane 1: molecular weight markers; lane 2: 30 μ g of total soluble proteins. After electrophoresis, the gel was stained with Coomassie-Blue Brilliant.

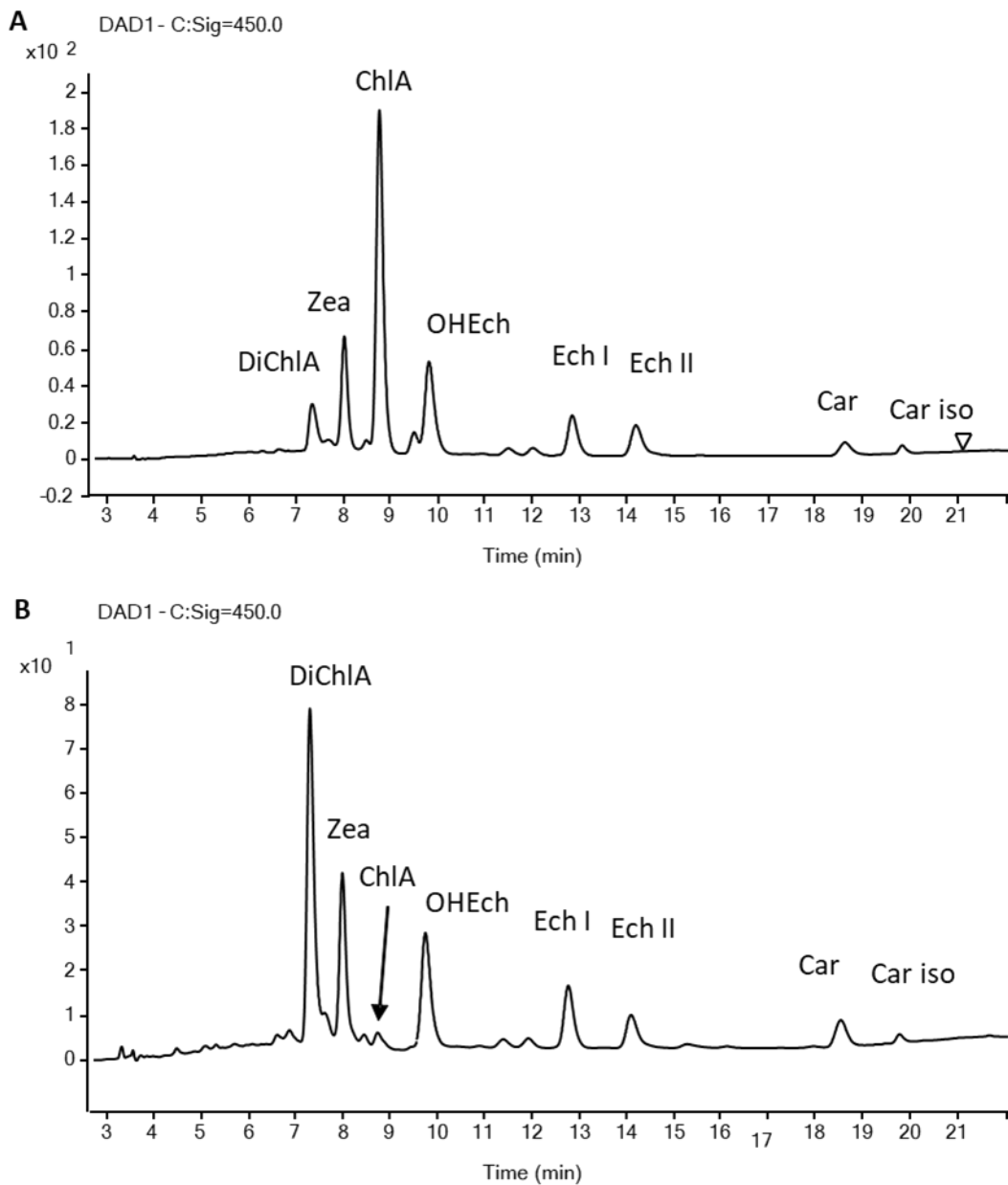


Figure S2. Carotenoids identification. Annotated HPLC-DAD chromatograms obtained at 450 nm for the extracts of *Synechocystis* sp. PCC6803 raw biomass (**A**) and *Synechocystis* sp. PCC6803 residual biomass (**B**).

Table S1. Tentatively identification of compounds from *Synechocystis* sp. PCC6803 by HPLC-DAD-APCI-QTOF analysis. Peak annotation, high-resolution mass spectrometry features and UV-Vis maxima are reported.

Peak	RT (min)	Identification	Monoisotopic mass	Theoretical $[M + H]^+ m/z$	Experimental $[M + H]^+ m/z$	Error (ppm)	UV-Vis maxima (nm)
DiChlA	7.419	Divinylchlorophyll A	890.5197	891.5269	891.5260	-1.06	340s, 380s, 428
Zea	8.057	Zeaxanthin	568.4280	569.4353	569.4346	-1.24	420s, 445, 480
ChlA	8.778	Chlorophyll A	892.5353	893.5426	893.5450	2.69	340, 380s,430
OHEch	9.826	Hydroxyechinenone	566.4124	567.4197	567.4191	-0.98	420s, 445, 476
Ech I	12.884	Echinenone I	550.4175	551.4247	551.4234	-2.43	460
Ech II	14.237	Echinenone II	550.4175	551.4247	551.4251	0.65	460
Caro	18.650	β -Carotene	536.4382	537.4455	537.4452	-0.52	420s, 450, 480
Car iso	19.800	Carotene isomer	536.4382	537.4455	537.4440	-2.75	420s, 450, 480