

Supplementary Information

Decolorization of Textile Dyes by Cyanobacteria

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Table S1. Chemical structures of dyes

Dyes	Structures	Dyes	Structures
Remazol		Dispersol red	
Indigo		Indanthrene red	
Indanthrene blue		Drimaren yellow	
Drimaren blue		Palanil yellow	
Dispersol blue		Indanthrene yellow	
Drimaren red			

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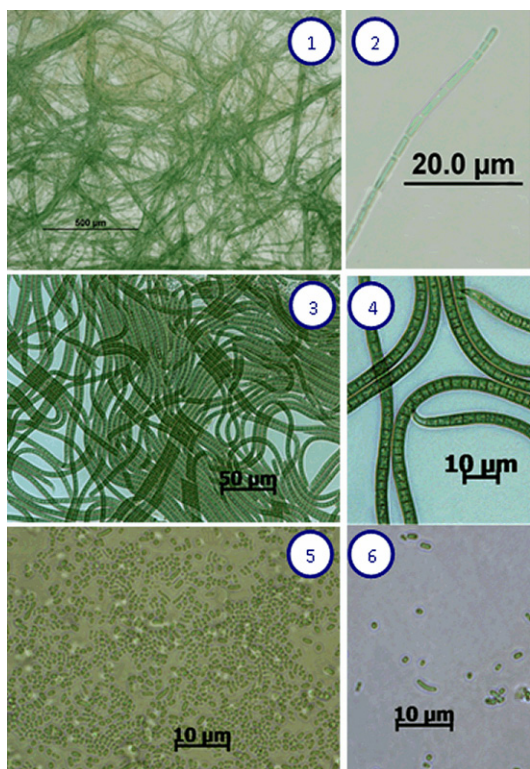


Figure S1. Light photomicrography of the strains used in this study: 1-2. *Leptolyngbya* sp. CENA134, 3-4. *Phormidium* sp. CENA135 and 5-6. *Synechococcus* sp. CENA136.

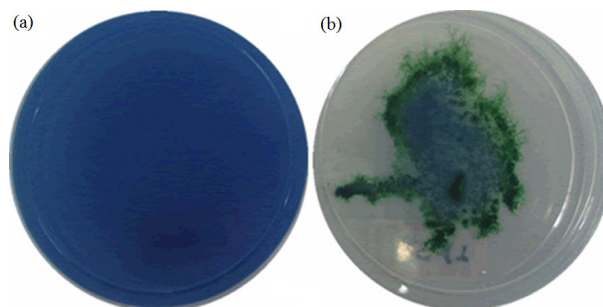


Figure S2. Solid culture medium containing indigo: (a) without inoculum and (b) inoculated with *Leptolyngbya* sp. CENA134. Decolorization occurred after 26 days of growth.

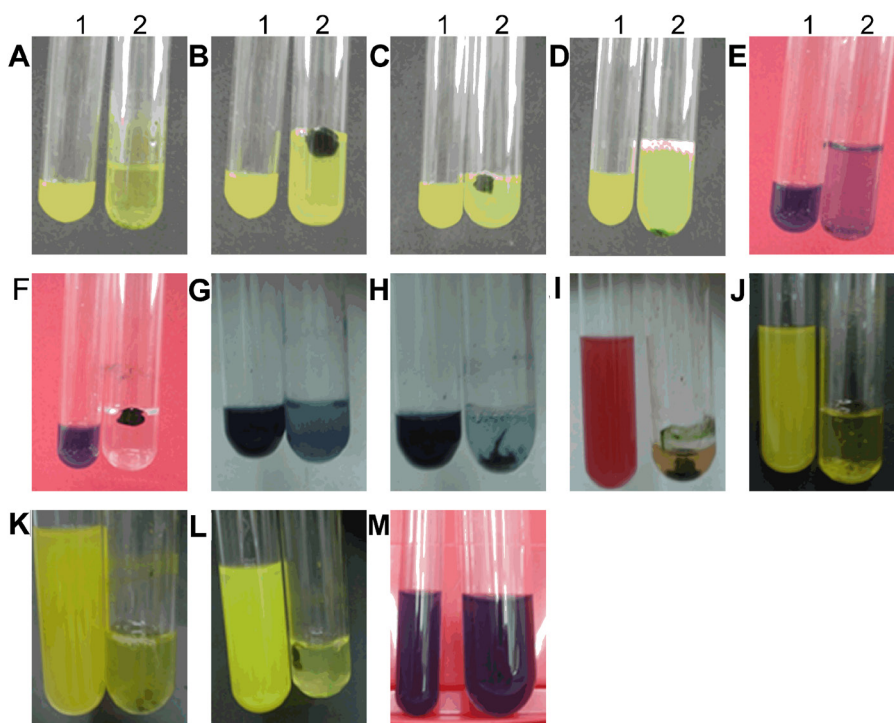


Figure S3. Decolorization of palanil yellow by (A) *Leptolyngbya* sp. CENA134, (B) *Phormidium* sp. CENA135, (C) indanthrene yellow by *Phormidium* sp. CENA135, (D) *Leptolyngbya* sp. CENA134, (E) indigo by *Leptolyngbya* sp. CENA134, (F) *Phormidium* sp. CENA135, (G) *Leptolyngbya* sp. CENA103, (H) *P. autumnale* UTEX1580, (I) indanthrene red by *P. autumnale* UTEX1580, (J) palanil yellow by *Leptolyngbya* sp. CENA104, (K) *P. autumnale* UTEX1580, (L) indanthrene yellow by *P. autumnale* UTEX1580 and (M) Photodecolorization control; (1) control (culture medium without cyanobacteria + dye) and (2) culture medium + cyanobacteria + dye. Pictures were taken after 26 days of growth.

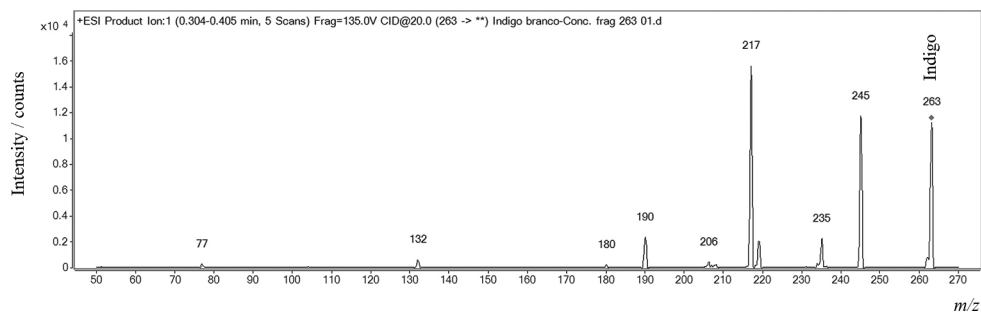


Figure S4. Positive mode ESI-MS/MS spectrum of indigo (m/z 263) in SWBG-11 culture without inoculum.

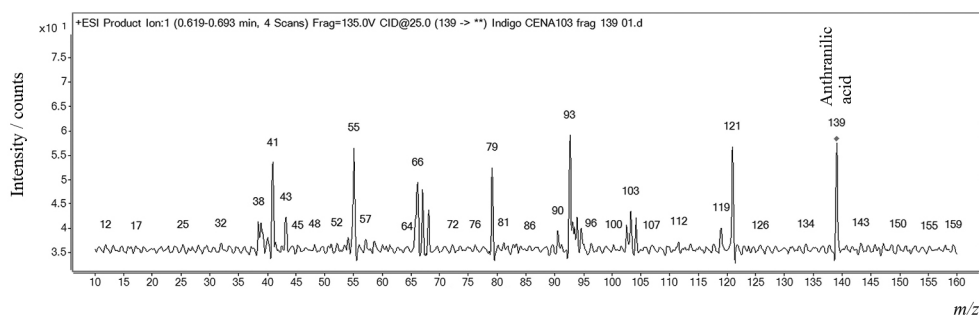


Figure S5. ESI-MS/MS spectrum showing anthranilic acid (m/z 139) in culture of *Leptolyngbya* sp. CENA103 at 5 days of growth.

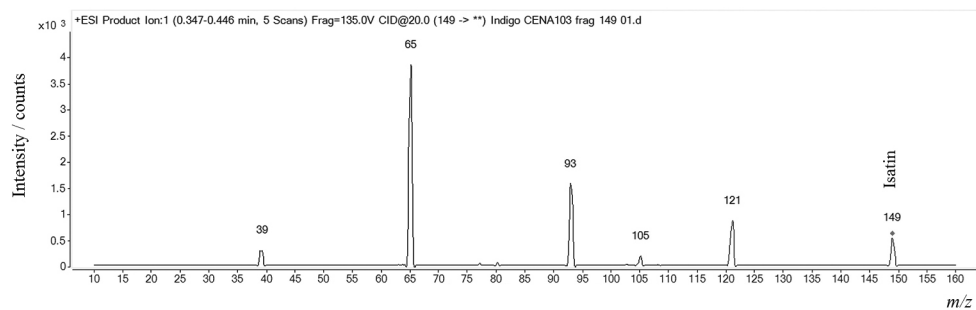


Figure S6. ESI-MS/MS spectrum showing isatin (m/z 149) present in culture of *Leptolyngbya* sp. CENA103 at 5 days of growth.