

ESI

Enhancing the Biochemical Growth of *Haematococcus pluvialis* through Mitigation of Broad-Spectrum Light Stress in Wastewater Cultures

Megha Mourya^{1,#}, Mohd. J. Khan^{1,#}, Vandana Sirotiya^{1,2,#}, Ankesh Ahirwar^{1,2}, Benoit Schoefs², Justine Marchand², Sunita Varjani^{3,4} and Vandana Vinayak^{1,*}

¹Diatom Nanoengineering and Metabolism Laboratory (DNM), School of Applied science,
Dr. Hari Singh Gour Central University, Sagar (MP) 470003, India.

²Metabolism, Bioengineering of Microalgal Metabolism and Applications (MIMMA),
Biology of Organisms, Stress, Health and Environment, Le Mans University, IUML - FR
3473 CNRS, Le Mans, France

³School of Energy and Environment, City University of Hong Kong, Tat Chee Avenue,
Kowloon, 999077, Hong Kong

⁴Sustainability Cluster, School of Engineering, University of Petroleum and Energy Studies,
Dehradun-248 007, Uttarakhand, India

*Corresponding author: kapilvinayak@gmail.com

Equally contributed first authors

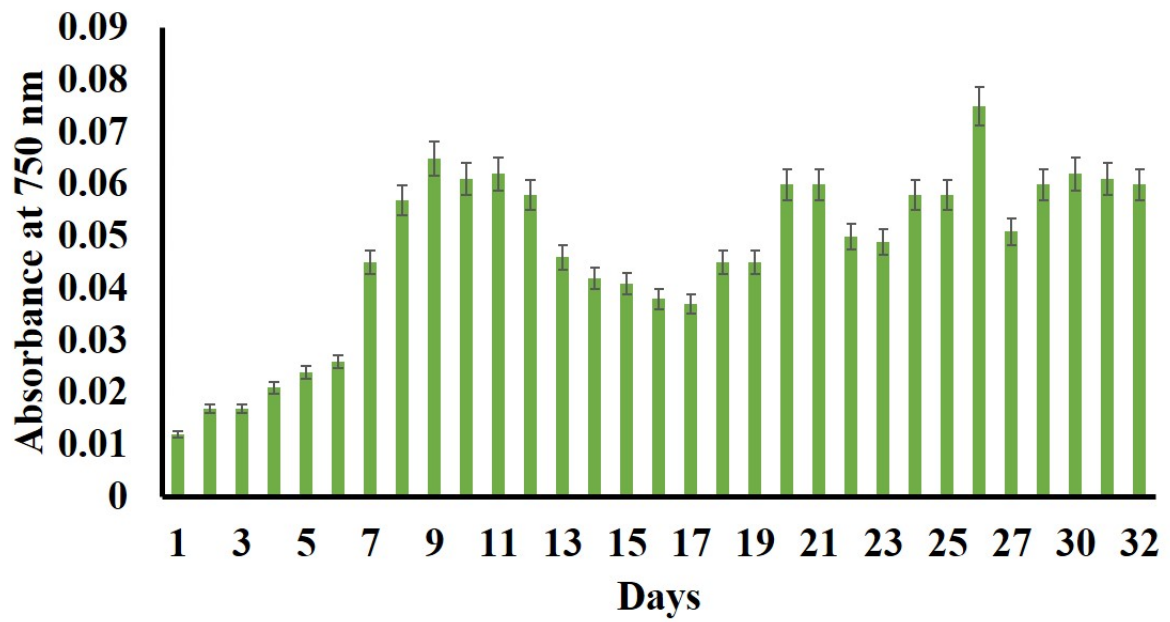


Figure S1. Optical density of *Haematococcus pluvialis* cells in a conical flask for 32 days at 750 nm

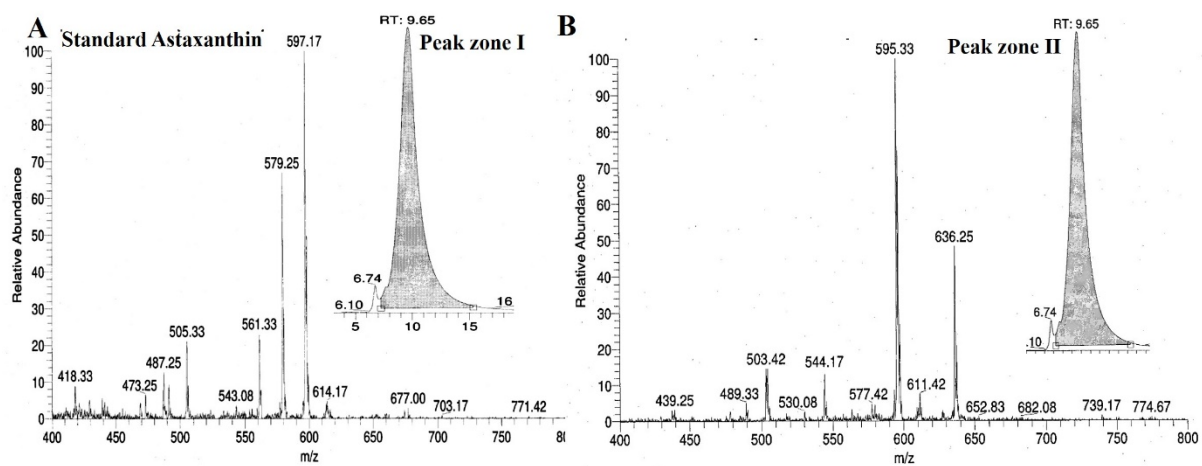


Figure S2. LCMS of astaxanthin standard at different ranges of its peak at RT 9.65

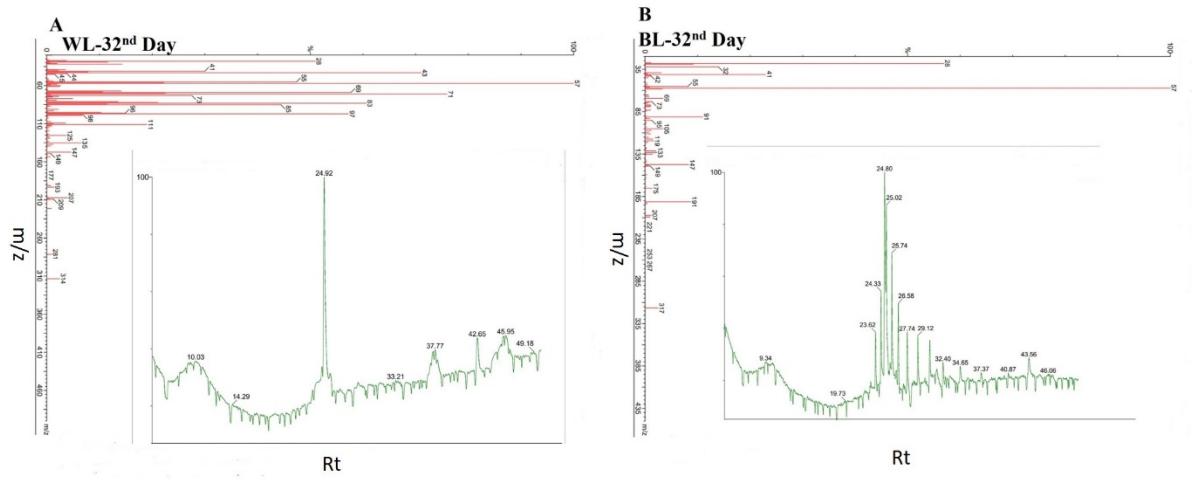


Figure S3. GCMS chromatogram of FAME of standard linseed oil at RT 36.60 and decanoic acid at RT 5.69