Tracing the impact of domestic storage conditions on antioxidant activity and lipid profiles in the edible microalgae *Chlorella vulgaris* and *Tetraselmis chui*

Diana Lopes[1,2*], Felisa Rey[1,2], Alexandrina Gomes[2], Luís Duarte[2], João Pereira[1], Marisa Pinho[1], Tânia Melo[1,2], Rosário Domingues[1,2]

[1] Centre of Environmental and Marine Studies (CESAM), Department of Chemistry, Campus Universitário de Santiago, University of Aveiro, 3810-193 Aveiro, Portugal
[2] Mass Spectrometry Centre & LAQV-REQUIMTE, Department of Chemistry, Campus Universitário de Santiago, University of Aveiro, 3810-193 Aveiro, Portugal

*Correspondence: dianasalzedaslopes@ua.pt

Supplementary information

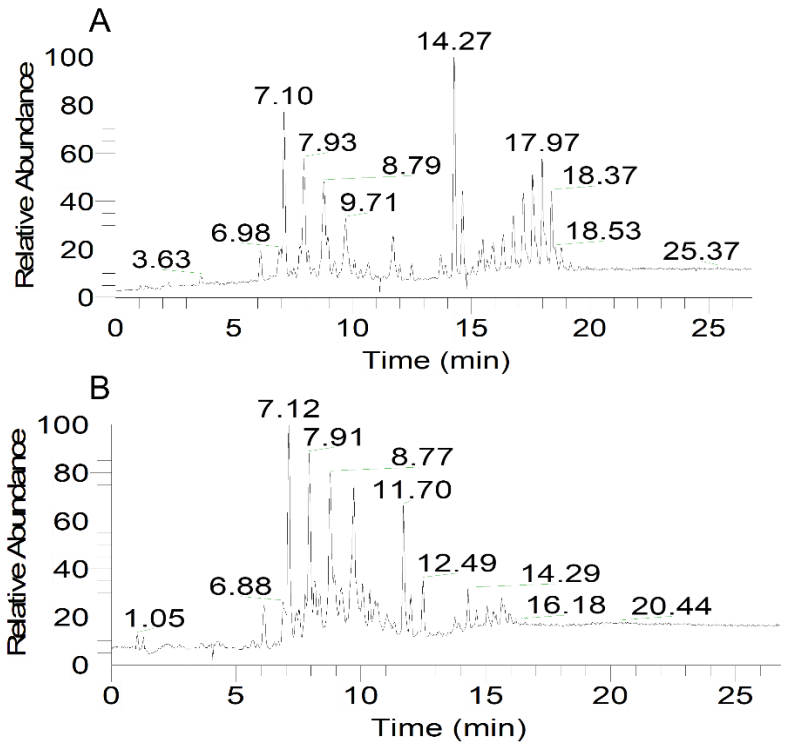


Figure S1. Total ion chromatograms of lipid extract of *Chlorella vulgaris* under control condition in positive (**A**) and negative (**B**) ionization modes by C18-LC-MS

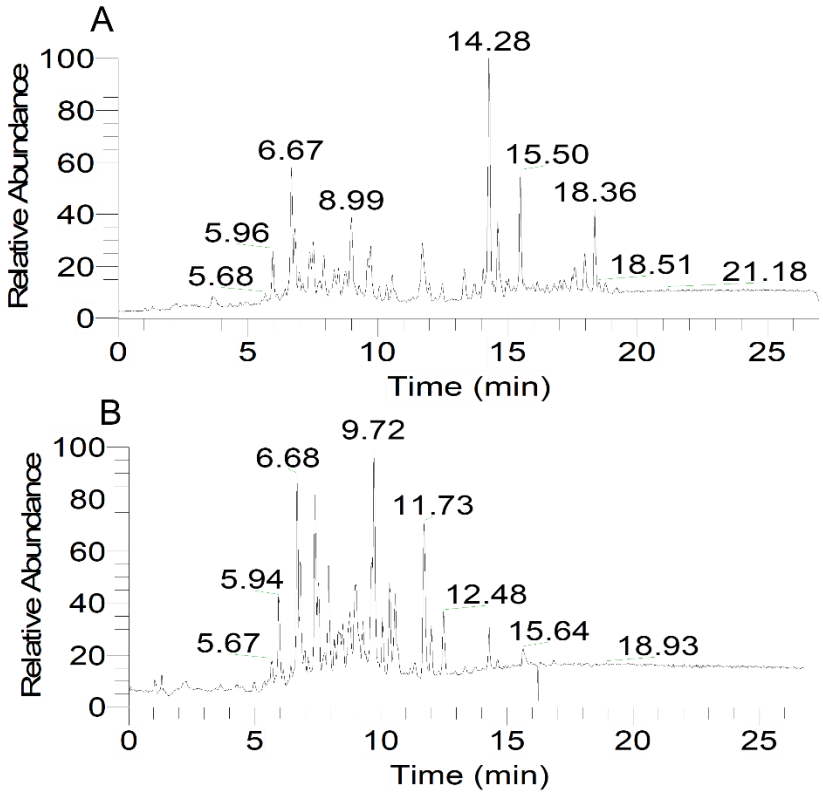


Figure S2. Total ion chromatograms of lipid extract of *Tetraselmis chui* under control condition in positive (**A**) and negative (**B**) ionization modes by C18-LC-MS

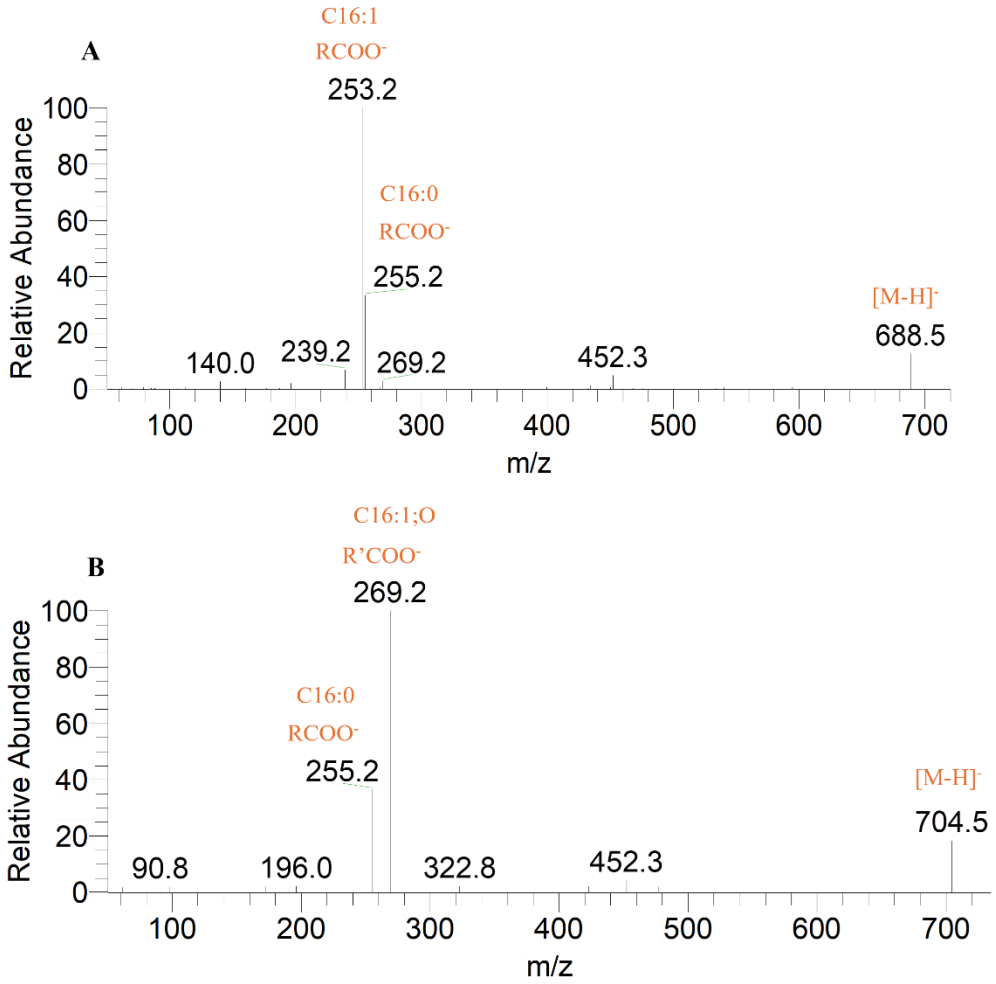


Figure S3. LC-MS/MS spectrum in negative mode of PE 32:1 specie at m/z 688.5 corresponding to PE 16:0; 16:1 identified in *Chlorella vulgaris* under control condition (**A**) and PE 32:1;O at m/z 704.5 corresponding to PE 16:0; 16:1; O identified in *Chlorella vulgaris* under light condition (**B**).

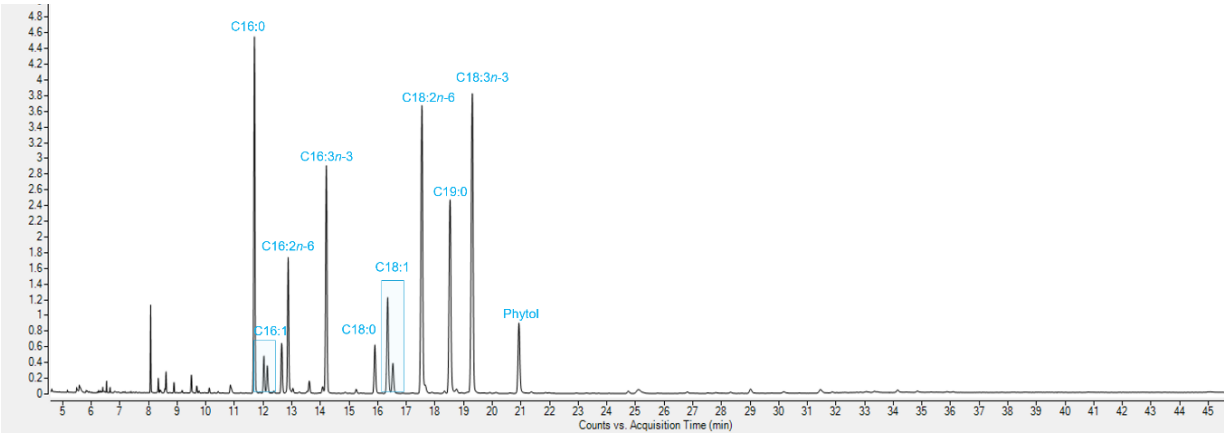


Figure S4. GC-MS chromatogram of *Chlorella vulgaris* under control condition highlighting the identified esterified fatty acids.

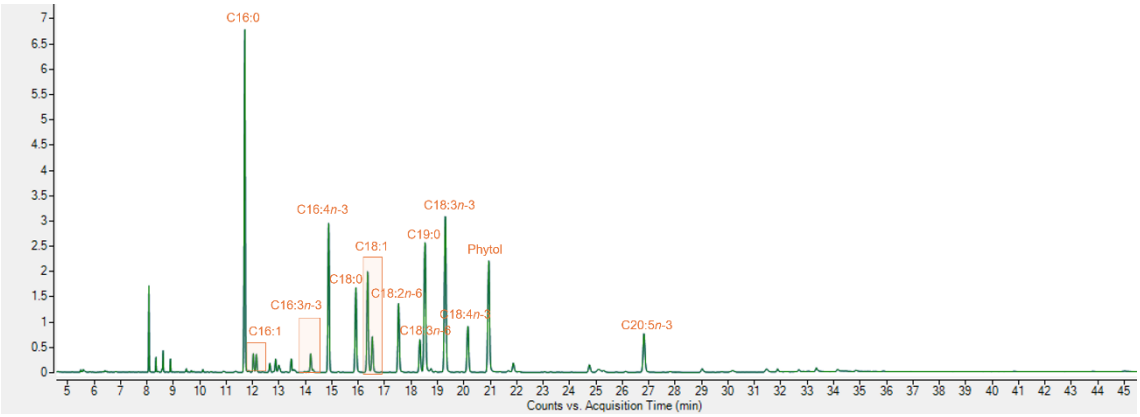


Figure S5. GC-MS chromatogram of *Tetraselmis chui* under control condition highlighting the identified esterified fatty acids.