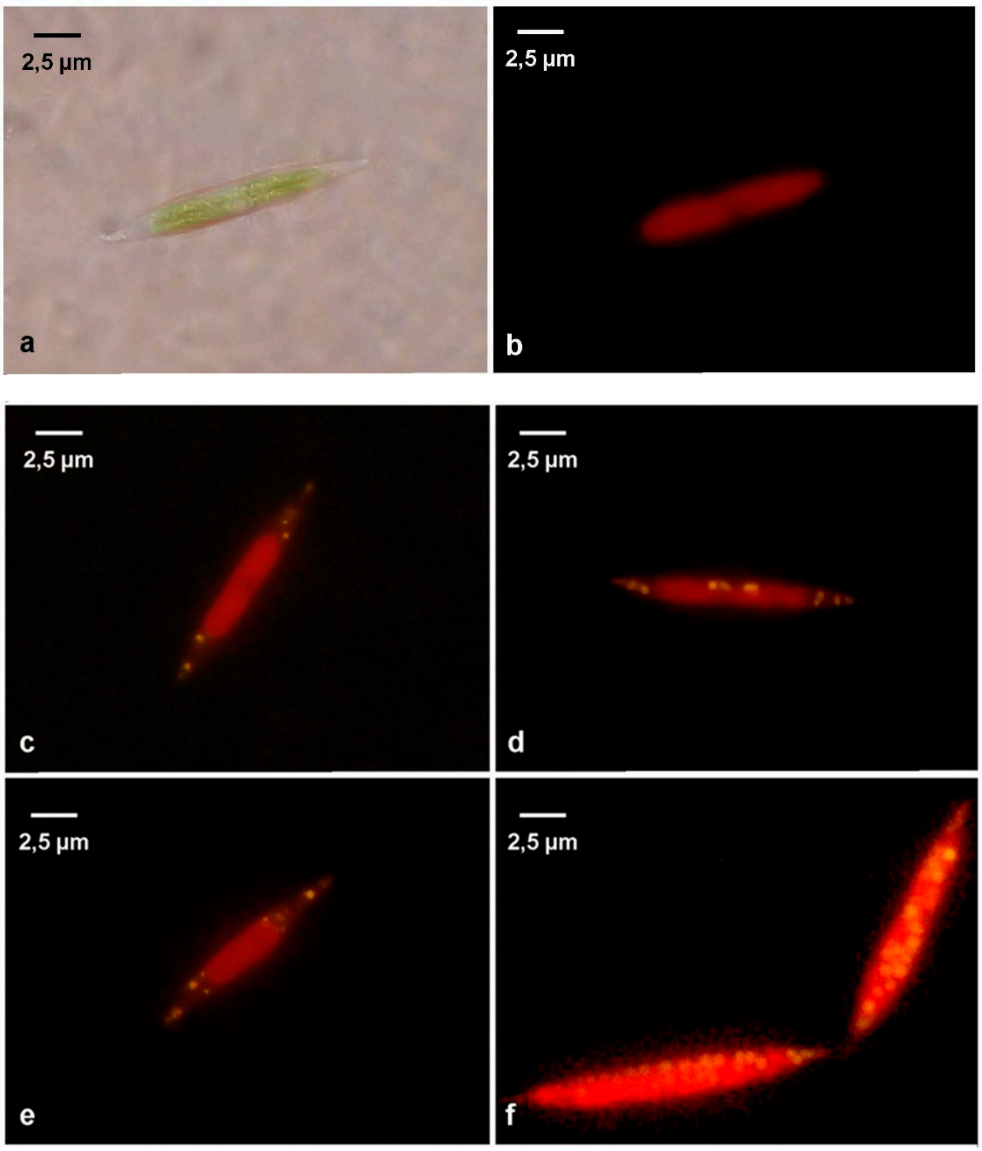
applied sciences

MDPI

Supplementary Materials: The Effects of Photobioreactor Type on Biomass and Lipid Production of the Green Microalga *Monoraphidium pusillum* in Laboratory Scale

István Bácsi [1,*], Fruzsina Tóthfalusi [2], Kamilla Márton [1], Viktória B-Béres [3] and Sándor Gonda [4]



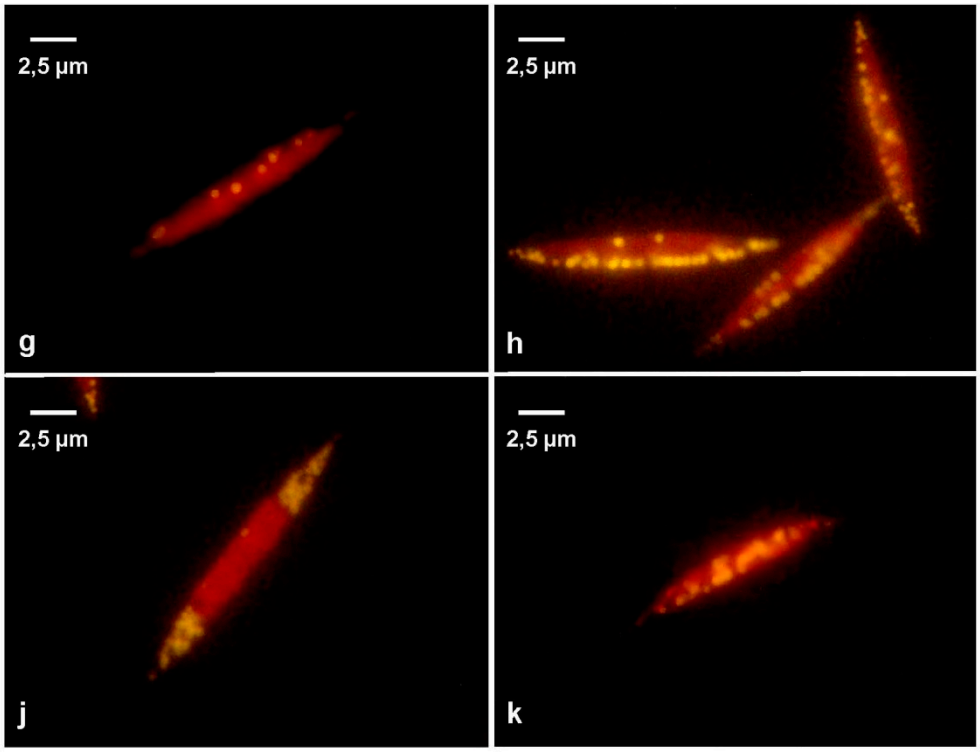


Figure S1. *Monoraphidium pusillum* cells (**a**) in inoculum, without staining; (**b**) in inoculum, with Nile red fluorescent staining; further photographs were taken on the 3rd and the 7th day with Nile red fluorescent staining (**c,d**) in control cultures; e,f) in 75% nitrate containing cultures; (**g,h**) in 50% nitrate containing cultures and (**j,k**) in 25% nitrate containing cultures. Golden yellow spots represent neutral lipid drops.

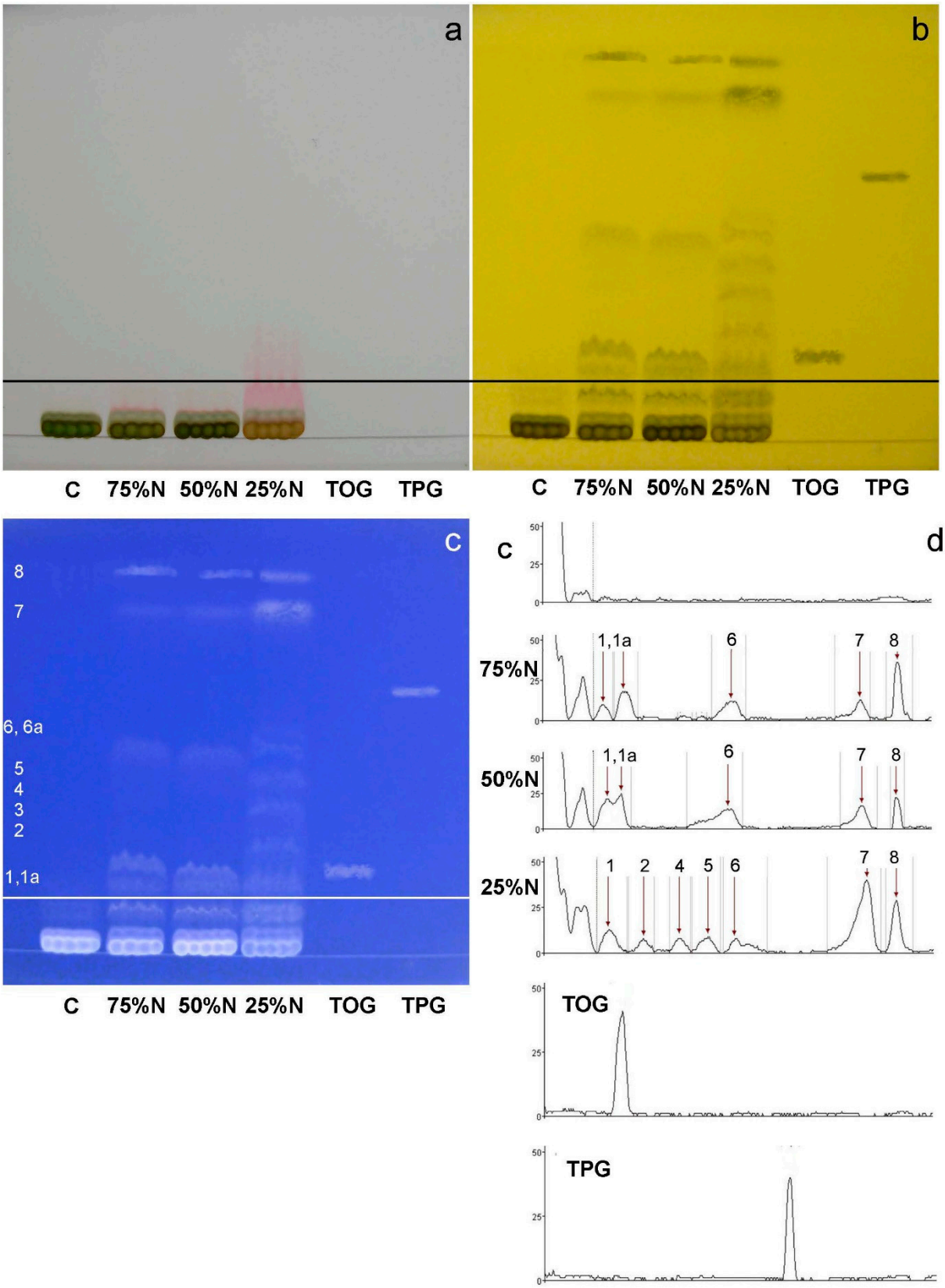


Figure S2. Preliminary analysis of the lipid content of *Monoraphidium pusillum* control (C) and nitrate depleted (75–25% N) cultures from the hybrid reactor by thin layer chromatography. (**a**) the TLC plate after the run; (**b**) the TLC plate after development; (**c**) the negative image of the developed TLC plate created for pattern analysis; d) the peaks found by using CpAtlas 2.0 software. 1–8: the separated bands (peaks); TOG: trioleil glycerol and TPG: tripalmitoyl glicerol standards.

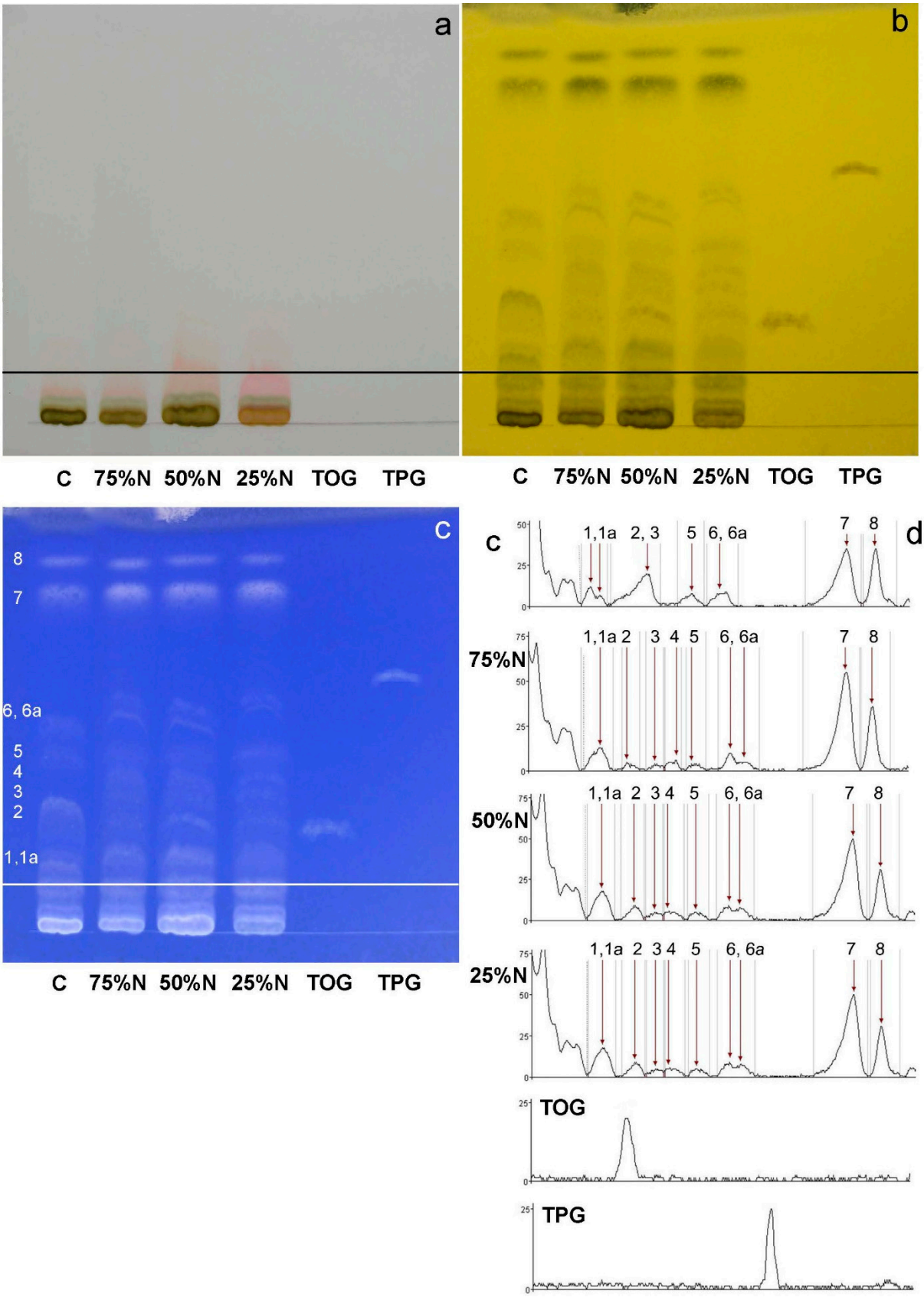


Figure S3. Preliminary analysis of the lipid content of *Monoraphidium pusillum* control (C) and nitrate depleted (75–25% N) cultures from the tank reactor by thin layer chromatography. (**a**) the TLC plate after the run; (**b**) the TLC plate after development; (**c**) the negative image of the

developed TLC plate created for pattern analysis; (**d**) the peaks found by using CpAtlas 2.0 software. 1–8: the separated bands (peaks); TOG: trioleil glycerol and TPG: tripalmitoyl glicerol standards.