Electronic Supplementary Material (ESI) for RSC Advances.

Supplemental Information

Figure S1 (full page width)

Schematic of the lipid trap system. 1) 24/40 Friedrich's condenser 2) 34/45 to 24/40 glass reducing joint 3) temperature probe connected to hot plate or standard thermometer 4) 2 L pyrex bottle fitted male 24/40 joint and GL-14 threaded adapter for thermometer 5) 105˚ 24/40 glass connecting elbow 6) 24/40 GL-14 thermometer adapter 7) standard thermometer 8) 1 L 24/40 20˚ two-neck roundbottom flask 9) standard or thermometer controlled heat/stir plate 10) 1 L heating mantle

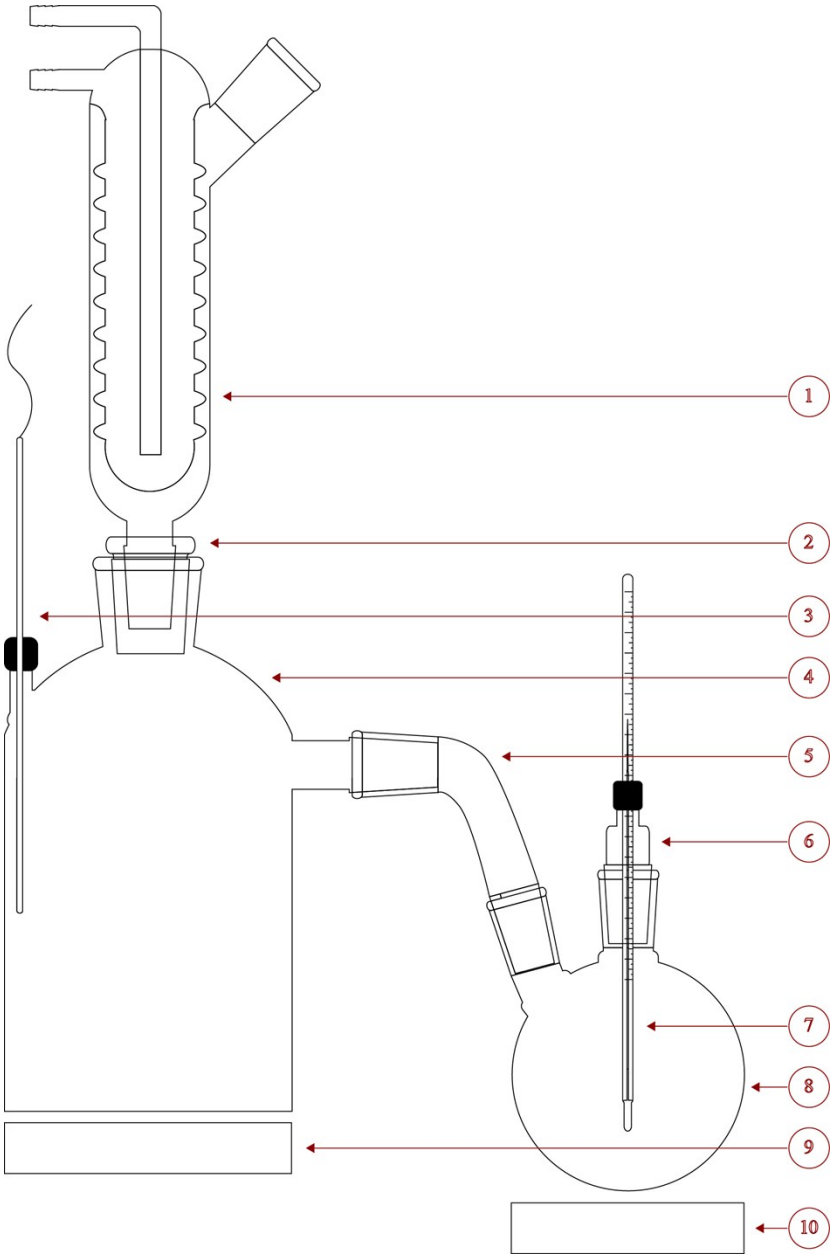

Figure S2 (full page width)

Compositional comparison using TLC and GC/MS of lipid trap extracts during timecourse experiments. TLC of vegetable oil (VO) is shown for comparison.

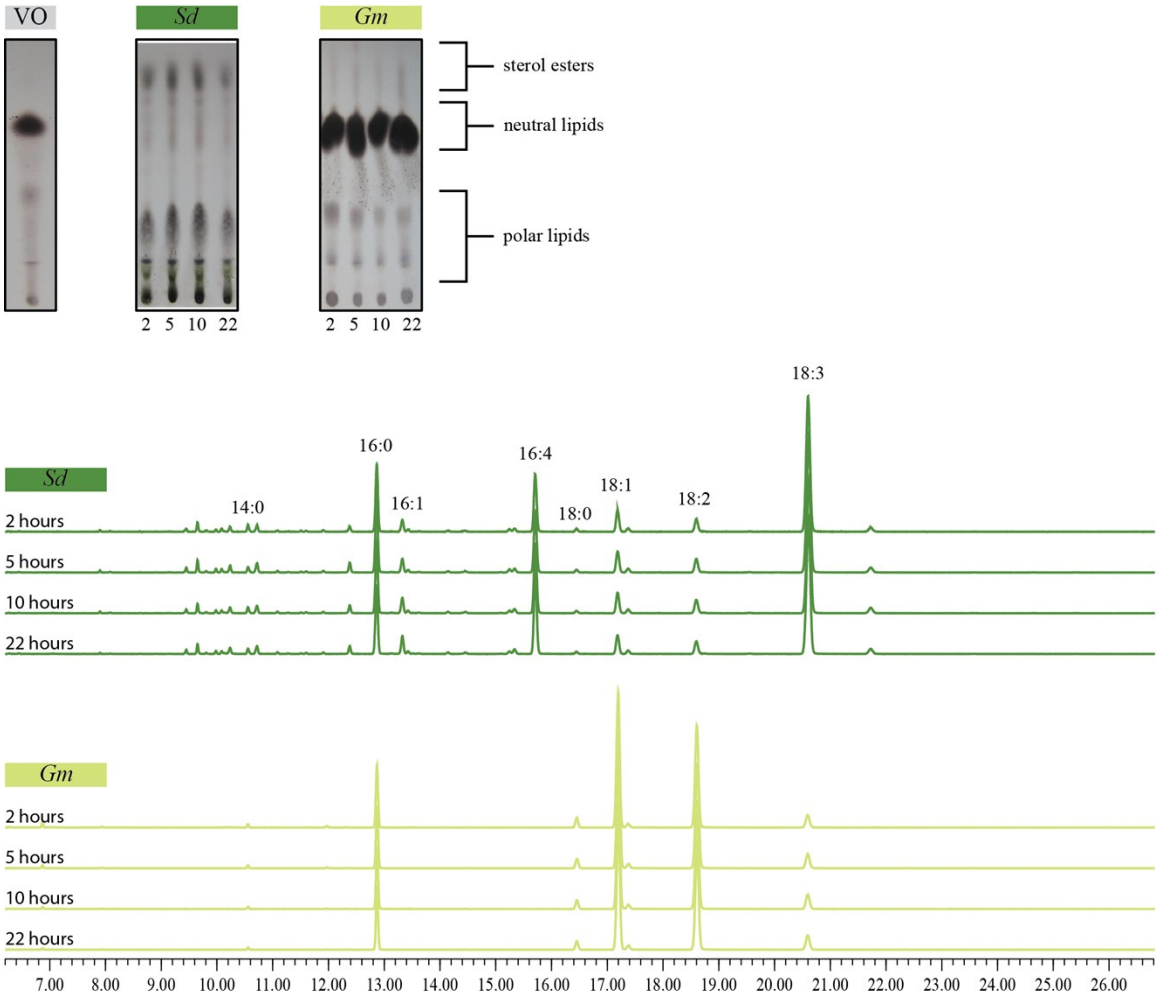

Figure S3 (full page width)

Microscopy of selected feedstock showing intact cells and biomass after Bligh and Dyer extraction and lipid trap extraction.

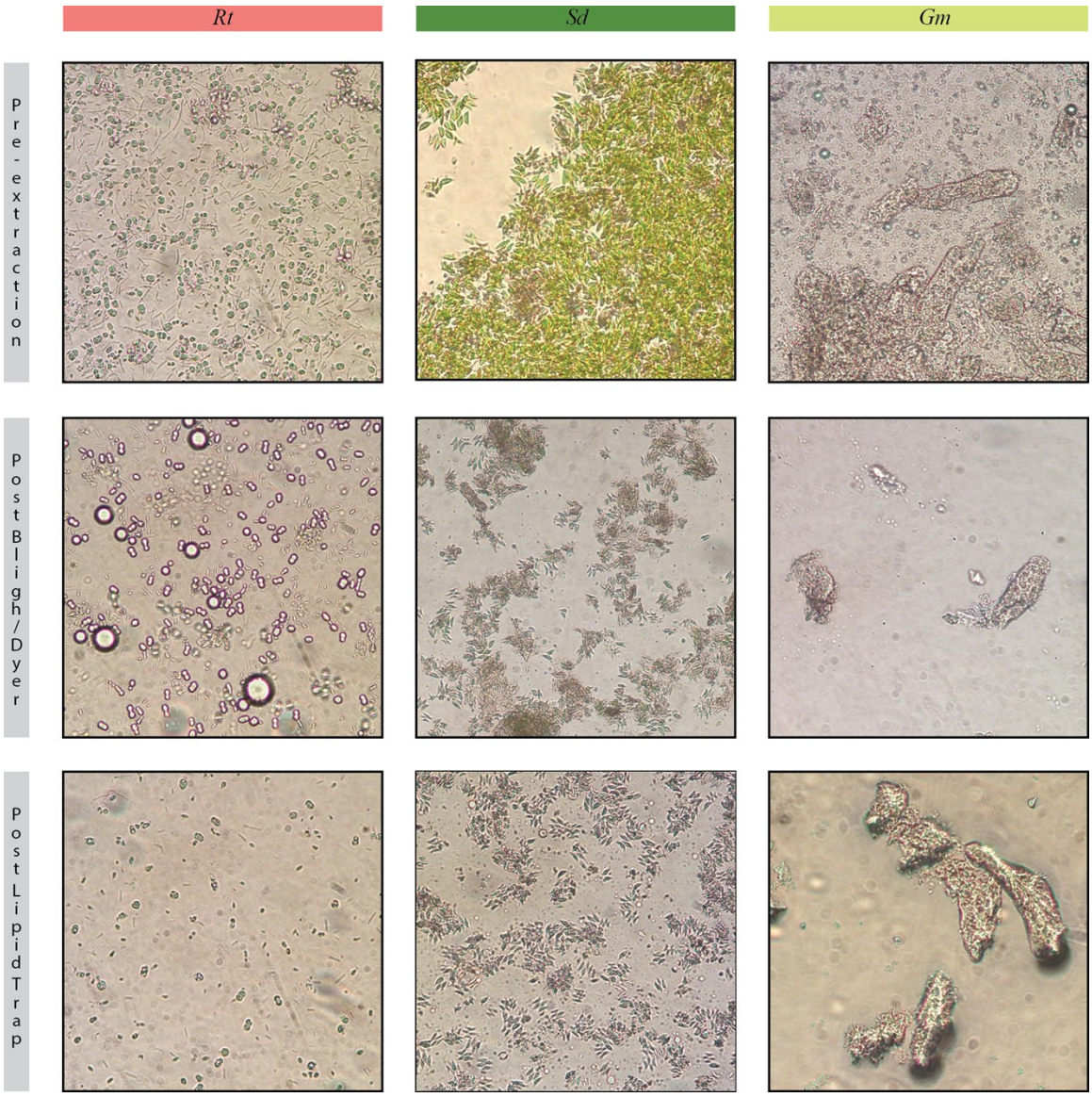

Figure S4

Lipid trap efficiency using varying transfer solvents with *Gm* feedstock. Solid bars represent extraction efficiency using the lipid trap, hashed bars represent standard Bligh and Dyer extraction.

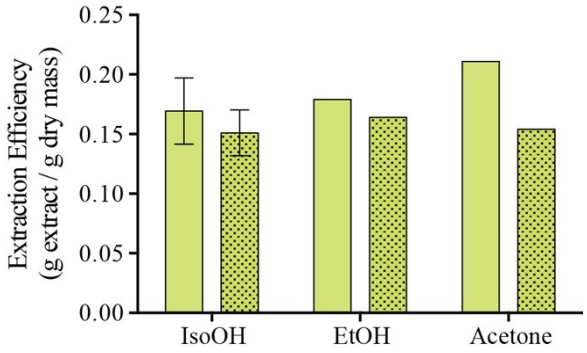

Figure S5

Lipid content (black) and percent solids (green) of freshly harvested *Sd* over ten days of drying outdoors. All analytical methods were performed as described in the text. Lipid content was measured using the method of Bligh and Dyer. Quadruplicate samples were measured daily for the first five days and on day ten.