

Table S1. Lipid and fatty acid contents of *Mortierella* fungi incubated in different media in shaker flasks (mg g⁻¹ total dry weight).

Strains	Total lipid	TAG	ARA	EPA	PUFAs
<i>M. elongata</i> AG77, PDB, pH5.3	128.2 ± 11.9	15.3 ± 1.0	27.9 ± 1.3	6.14 ± 0.8	78.9 ± 1.3
<i>M. elongata</i> AG77, PDB, pH7.6	170.2 ± 17.6	31.8 ± 2.0	25.2 ± 3.1	1.7 ± 1.1	48.9 ± 2.9
<i>M. elongata</i> AG77, f/2+1% sugar	233.2 ± 21.8	106.1 ± 12.3	15.5 ± 0.2	3.0 ± 0.1	41.5 ± 1.1
<i>M. elongata</i> AG77, f/2	238.8 ± 14.5	94.6 ± 4.5	42.4 ± 2.3	4.3 ± 0.5	89.1 ± 4.8
<i>M. gamsii</i> GBAus22, PDB, pH5.3	101.2 ± 13.6	5.3 ± 1.4	33.8 ± 2.4	2.09 ± 0.08	69.9 ± 0.9
<i>M. gamsii</i> GBAus22, PDB, pH7.6	108.9 ± 12.5	11.7 ± 1.4	31.7 ± 1.4	2.9 ± 0.2	58.3 ± 1.8
<i>M. gamsii</i> GBAus22, f/2+1% sugar	139.4 ± 12.5	34.7 ± 4.4	16.4 ± 1.6	2.1 ± 0.2	39.0 ± 3.1
<i>M. gamsii</i> GBAus 22, f/2	178.0 ± 23.9	54.9 ± 3.9	29.3 ± 2.1	1.7 ± 0.5	66.1 ± 2.2

TAG, triacylglycerol; ARA, arachidonic acid (20:4); EPA, eicosapentaenoic acid (20:5); PUFAs, polyunsaturated fatty acids; f/2+1% sugar, f/2 medium supplemented with 1% glucose, pH7.6. Results are the average of five biological replicates with error bars indicating standard deviations.