

Table S1. TEA treatment effect in PLFA lipids.

	SG		SG + NO ₃ ⁻		SG + Fe		SG + SO ₄ ⁻		P ^a				
	Avg ±	SD	Avg ±	SD	Avg ±	SD	Avg ±	SD					
Fungal lipids													
16:1w5c	2.59 ±	1.09	2.60 ±	0.58	2.19 ±	1.51	1.91 ±	0.69					
18:2w6,9c	17.2 ±	4.48	13.8 ±	3.83	14.8 ±	3.73	15.0 ±	3.57					
18:1w9c	184.8 ±	24.6	146 ±	21.1	127.5 ±	14.5	181.6 ±	47.2					
Branched lipids (Gram + bacteria)													
i14:0	1.59 ±	1.29	0.47 ±	0.06	9.80 ±	10.7	0.70 ±	0.62					
15:010Me	1.96 ±	1.03	1.13 ±	1.22	2.24 ±	3.00	0.35 ±	0.37					
i15:0	3.48 ±	2.02	1.03 ±	0.53	3.20 ±	3.26	0.82 ±	0.19					
a15:0	4.15 ±	3.85	3.41 ±	0.99	5.36 ±	4.62	1.66 ±	0.39					
i16:0	2.48 ±	1.05	1.24 ±	0.75	10.5 ±	2.61	1.13 ±	0.42					
i17:0	7.30 ±	0.93	5.35 ±	1.60	4.71 ±	1.34	5.46 ±	1.32					
Mid-chain branched unsaturated lipids (sulfate reducers)													
i17:1w9c	26.0 ±	2.55	17.8 ±	11.0	16.6 ±	14.8	8.67 ±	5.47					
a17:1w9c	0.68 ±	0.27	0.89 ±	0.40	0.94 ±	0.38	0.42 ±	0.10					
10Me16:0	2.49 ±	0.69	1.16 ±	0.65	7.56 ±	2.41	4.14 ±	4.83					
Mono-unsaturated and cyclopropyl lipids (Gram – bacteria)													
14:1	1.34 ±	0.42	1.09 ±	0.21	1.01 ±	0.24	1.67 ±	0.42					
15:1w10	0.95 ±	0.38	0.84 ±	0.21	0.51 ±	0.57	0.26 ±	0.13					
16:1w7c	17.9 ±	3.84	b	14.9 ±	4.13	ab	10.1 ±	2.41	a	15.0 ±	3.64	ab	*
17:1w9c	1.46 ±	0.30	ab	0.58 ±	0.19	a	1.44 ±	1.08	b	0.87 ±	0.21	ab	*
18:1w7c	4.17 ±	1.86		3.51 ±	0.92		1.65 ±	0.47		8.08 ±	1.60		
19:1	16.7 ±	2.65	a	14.6 ±	7.14	a	5.20 ±	3.13	b	3.62 ±	2.34	ab	*
cy19:0	1.10 ±	0.42		1.17 ±	0.25		1.26 ±	0.60		1.88 ±	1.66		
Saturated lipids (general biomass)													
14:0	19.9 ±	4.22		14.9 ±	3.80		18.0 ±	7.21		19.5 ±	3.08		
15:0	3.17 ±	1.11		1.61 ±	0.56		1.98 ±	0.87		1.71 ±	0.17		
16:0	71.7 ±	12.2		57.8 ±	17.8		66.8 ±	26.9		57.4 ±	5.11		
17:0	3.76 ±	1.17		2.45 ±	0.74		2.52 ±	2.12		1.92 ±	0.65		
18:0	35.2 ±	4.70	c	32.7 ±	5.50	bc	20.6 ±	6.66	ab	20.0 ±	3.70	a	**
Trans lipids (stress biomarkers)													
16:1w7t	1.51 ±	0.39	b	1.21 ±	0.39	ab	0.68 ±	0.30	a	0.67 ±	0.06	a	**
18:2w6,8t	19.3 ±	3.23		11.8 ±	3.10		15.4 ±	3.24		15.6 ±	3.34		
18:1w9t	48.1 ±	6.04		46.2 ±	16.3		37.1 ±	10.0		40.9 ±	10.3		
Total abundance													
	504.3 ±	60.5		400.2 ±	76.8		390.1 ±	124.5		411.1 ±	41.7		

^aFor P-values from ANOVA, * <0.05; ** <0.01; *** <0.001