

S3 Table. Results of ANOVAs testing the effect of four treatment classes on P effect sizes.

Four different phosphate chemicals (KH_2PO_4 , K_2HPO_4 , NaH_2PO_4 , Na_2HPO_4) crossed with laboratory heating methodology and two phosphate concentrations were deployed in an NDS experiment in 2017. Treatment classes in the statistical analyses included phosphate cation, phosphate form, and heating method, along with concentration as a potential modifier. Two-way ANOVA results are presented where each treatment class was crossed with concentration, to determine effects on each response variable's P treatment effect size. $P < 0.05$ is indicated as “*”.

Factor	Chla		AFDM		AI		GPP		GPP/Chla	
	<i>F</i>	<i>p</i>	<i>F</i>	<i>p</i>	<i>F</i>	<i>p</i>	<i>F</i>	<i>p</i>	<i>F</i>	<i>p</i>
Cation	0.124	0.725	0.275	0.601	0.079	0.800	0.044	0.835	0.234	0.630
Conc	0.263	0.609	1.231	0.270	0.901	0.345	0.767	0.384	0.107	0.744
Cation*Conc	1.507	0.223	0.060	0.806	0.311	0.578	0.858	0.357	0.000	1.000
Form	0.124	0.725	4.129	0.450	3.636	0.060	2.850	0.095	2.091	0.152
Conc	0.291	0.591	1.239	0.269	0.828	0.365	0.817	0.369	0.105	0.747
Form*Conc	0.586	0.446	0.097	0.756	0.008	0.927	0.475	0.493	1.045	0.309
Heat	0.700	0.405	0.005	0.944	0.296	0.588	2.234	0.138	5.540	0.021*
Conc	0.359	0.550	1.233	0.270	0.790	0.376	0.690	0.408	0.050	0.823
Heat*Conc	0.516	0.474	1.199	0.276	2.875	0.093	1.159	0.284	1.156	0.285