

Increased water colour affects freshwater plankton communities in a mesocosm study

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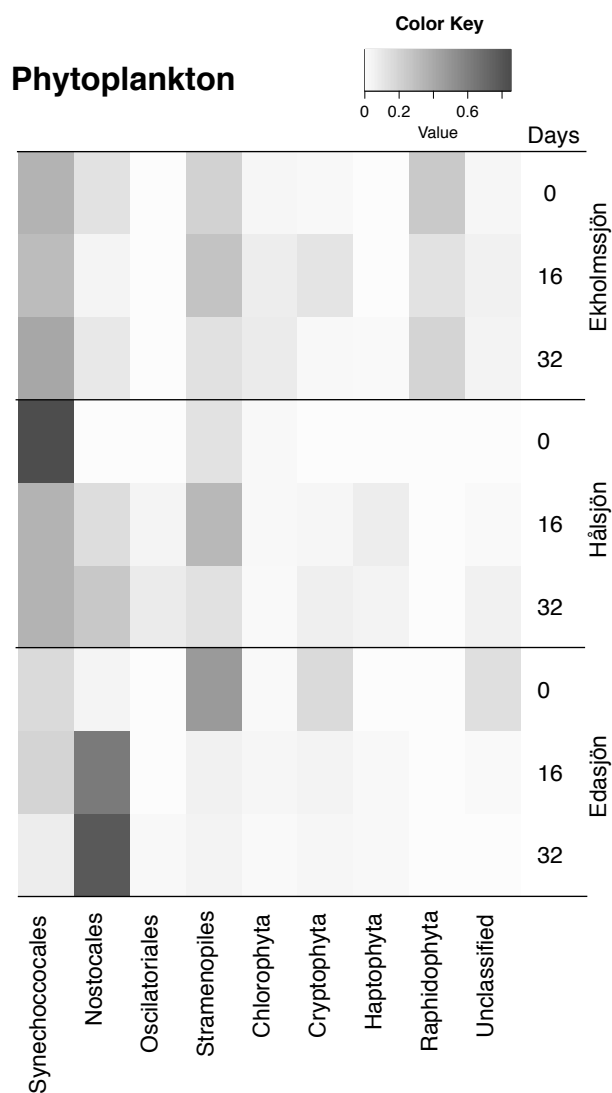


Fig. S1. Heat map of the relative number of reads for the different phytoplankton groups over time in the water column of the three experimental lakes.

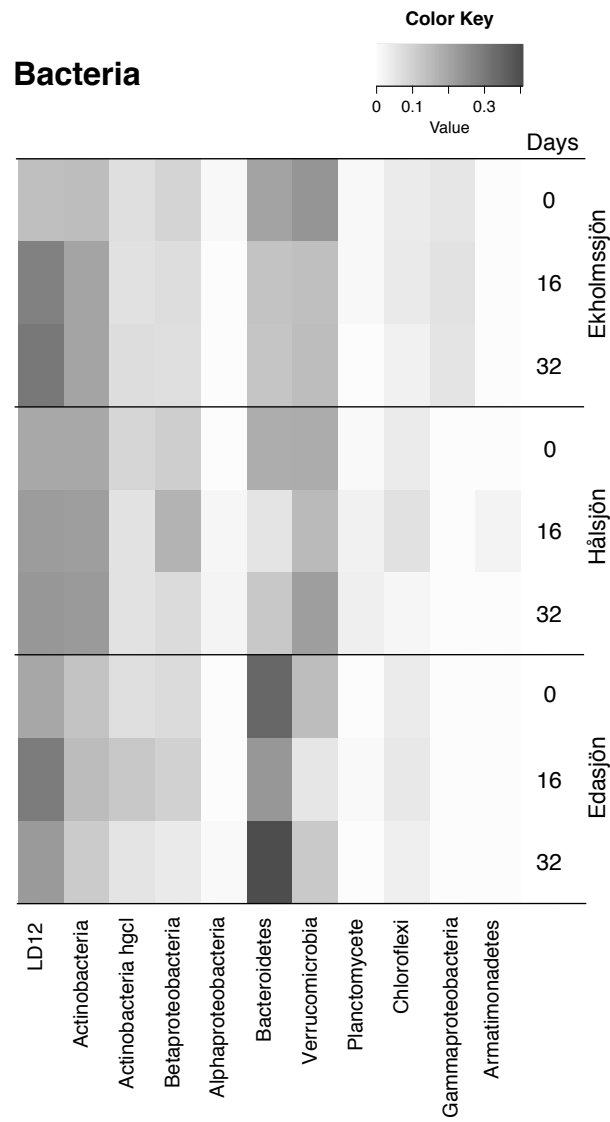


Fig. S2. Heat map of the relative number of reads for the different bacterial taxonomic groups over time in the water column of the three experimental lakes.

Table S1. Summary of the treatment effect according to the rmANOVA analyses on the water colour, function parameters and community richness and evenness (bacteria and phytoplankton), including the effect size η^2 . Bold Characters highlight the statistically significant values.

	Lake	Ekholmssjön			Hålsjön			Edasjön		
	Parameters	F _{3,6}	p	η^2	F _{3,6}	p	η^2	F _{3,7}	p	η^2
Chemistry	Water colour	614.25	<0.001	0.78	5951.13	<0.001	0.64	1946.24	<0.001	0.82
Abundance	Bacterial abundance	1.16	0.39	0.07	1.71	0.263	0.08	5.13	0.03	0.26
Functions	Bacterial production	7.19	0.021	0.39	3.06	0.11	0.04	1.41	0.3	0.16
	Respiration	2.18	0.19	0.27	0.88	0.5	0.18	1.4	0.3	0.29
	Chlorophyll concentration	0.47	0.7	0.07	0.48	0.7	0.02	0.36	0.8	0.03
Communities	Bacterial richness	3.92	0.07	0.14	1.31	0.36	0.07	5.81	0.026	0.24
	Bacterial evenness	1.67	0.27	0.11	2.65	0.14	0.04	0.8	0.53	0.03
	Phytoplankton richness	3.1	0.11	0.08	1.15	0.4	0.14	2.32	0.16	0.17
	Phytoplankton evenness	0.15	0.93	0.02	1.47	0.31	0.19	1.25	0.36	0.16

Table S2. Cohen's *d* effect size for the water colour, function parameters, and richness and evenness of the bacteria and phytoplankton communities (Treatments: C: Control, LH: Low HuminFeed®, MH: Medium HuminFeed®, and HH: High HuminFeed®).

	Parameters	Ekholmssjön			Hålsjön			Edasjön		
		LH	MH	HH	LH	MH	HH	LH	MH	HH
Chemistry	Water Colour	7.55	11.65	16.35	7.16	15.51	23.07	4.83	7.74	15.63
Abundance	Bacterial abundance	0.25	-0.29	-0.05	0.00	0.13	-0.30	0.52	1.49	1.00
Functions	Bacterial Production	-0.69	-1.23	-2.41	-0.29	0.20	-0.64	-0.38	-0.02	-0.88
	Respiration	-0.13	0.34	-1.20	0.21	0.87	0.19	0.32	-0.04	0.22
	Chlorophyll concentration	0.11	0.43	0.43	-0.15	0.44	-0.20	0.22	0.14	0.16
Communities	Bacterial richness	0.34	0.39	1.05	0.35	0.25	0.67	0.34	0.39	1.05
	Bacterial evenness	-0.33	0.07	0.17	-0.09	0.35	0.20	-0.04	0.23	0.22
	Phytoplankton richness	0.12	0.30	0.20	0.58	0.22	0.00	0.30	0.49	0.82
	Phytoplankton evenness	0.28	-0.13	-0.05	0.00	0.50	-0.60	0.58	0.22	0.00

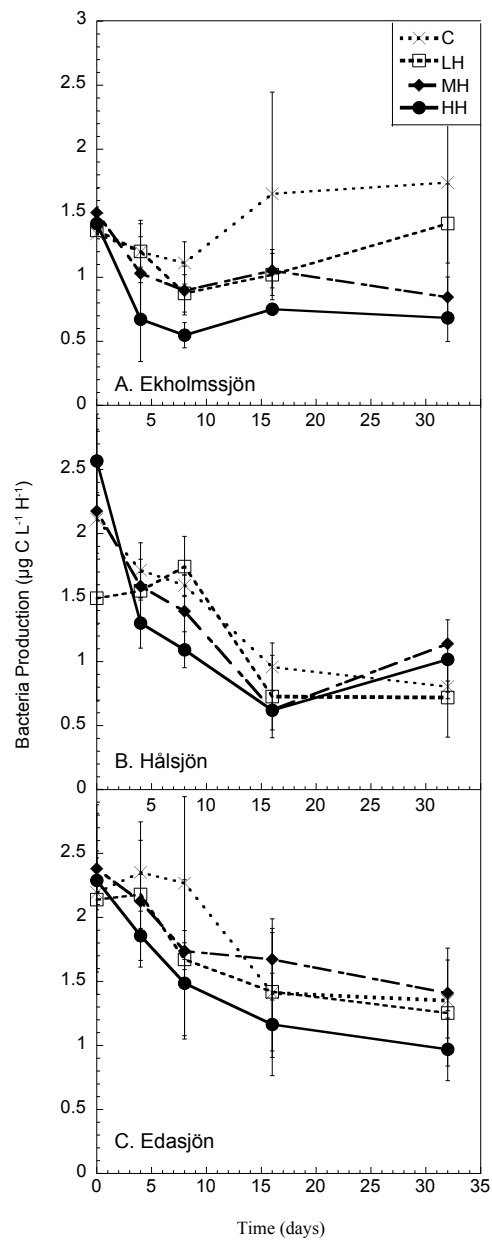


Fig. S3: Mean bacterial production (\pm SE) in the treatments over time in the three lakes. A: Ekholmssjön, B: Hålsjön, C: Edasjön (Treatments: C: Control, LH: Low HuminFeed[®], MH: Medium HuminFeed[®], and HH: High HuminFeed[®]). In Hålsjön, after day 16, only one mesocosm of the MH treatment remained, thus no standard deviation is available for day 16.

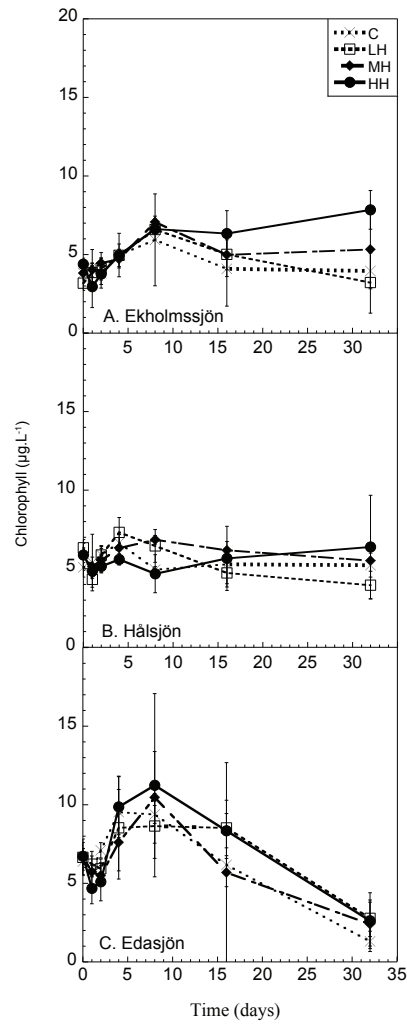


Fig. S4. Mean chlorophyll concentrations (\pm SE) in the treatments over time in the three lakes. A: Ekholmssjön, B: Hålsjön, C: Edasjön (Treatments: C: Control, LH: Low HuminFeed[®], MH: Medium HuminFeed[®], and HH: High HuminFeed[®]). In Hålsjön, after day 16, only one mesocosm of the MH treatment remained, thus no standard deviation is available for day 16.