

Supplementary materials for:

***Botryococcus braunii* reduces algal grazing losses to *Daphnia* and *Poteroochromonas* through both chemical and physical interference**

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Fig. S1: Effects of *B. braunii* treatment on algal biomass and growth rates with no grazers present

Table S1. 2-way ANOVA results testing effects of *B. braunii* treatment on biomass (max. chl-a fluorescence) and growth rates under different grazer treatments. Significance codes: ***p<0.001, **p<0.01, *p<0.05.

(A) Effects of Botryococcus treatment on chl-a biomass change with Daphnia as grazer

	Df	Sum of squares	Mean squares	F statistic	p value	significance
bot_medium	1	1180	1180	3.434	0.0787	.
bot_colonies	1	8678	8678	25.259	6.48E-05	***
bot_medium:bot_colonies	1	2272	2272	6.614	0.0182	*
Residuals	20	6871	344			

(B) Effects of Botryococcus treatment on growth rate change with Daphnia as grazer

	Df	Sum of squares	Mean squares	F statistic	p value	significance
bot_medium	1	0.4662	0.4662	14.35	0.001153	**
bot_colonies	1	1.2888	1.2888	39.68	3.78E-06	***
bot_medium:bot_colonies	1	0.5816	0.5816	17.91	0.000409	***
Residuals	20	0.6496	0.0325			

(C) Effects of Botryococcus treatment on chl-a biomass change with Poterioochromonas as grazer

	Df	Sum of squares	Mean squares	F statistic	p value	significance
bot_medium	1	5854	5854	205.3	1.23E-11	***
bot_colonies	1	796	796	27.9	4.25E-05	***
bot_medium:bot_colonies	1	4985	4985	174.8	4.95E-11	***
Residuals	19	542	29			

(D) Effects of Botryococcus treatment on growth rate change with Poterioochromonas as grazer

	Df	Sum of squares	Mean squares	F statistic	p value	significance
bot_medium	1	0.06428	0.06428	62.63	1.97E-07	***
bot_colonies	1	0.22312	0.22312	217.39	7.45E-12	***
bot_medium:bot_colonies	1	0.05086	0.05086	49.55	1.06E-06	***
Residuals	19	0.0195	0.00103			

(E) Effects of Botryococcus treatment on chl-a biomass with grazers absent

	Df	Sum of squares	Mean squares	F statistic	p value	significance
bot_medium	1	0.2985	0.29849	17.074	0.000517	***
bot_colonies	1	0.0319	0.03195	1.828	0.191512	
bot_medium:bot_colonies	1	0.0002	0.00023	0.013	0.910388	
Residuals	20	0.3496	0.01748			

(F) Effects of Botryococcus treatment on growth rate change with grazers absent

	Df	Sum of squares	Mean squares	F statistic	p value	significance
bot_medium	1	0.0002	0.0002	0.529	0.475547	
bot_colonies	1	1.6855	1.6855	4244.987	<2E-16	***
bot_medium:bot_colonies	1	0.0082	0.0082	20.694	0.000195	***
Residuals	20	0.0079	0.0004			

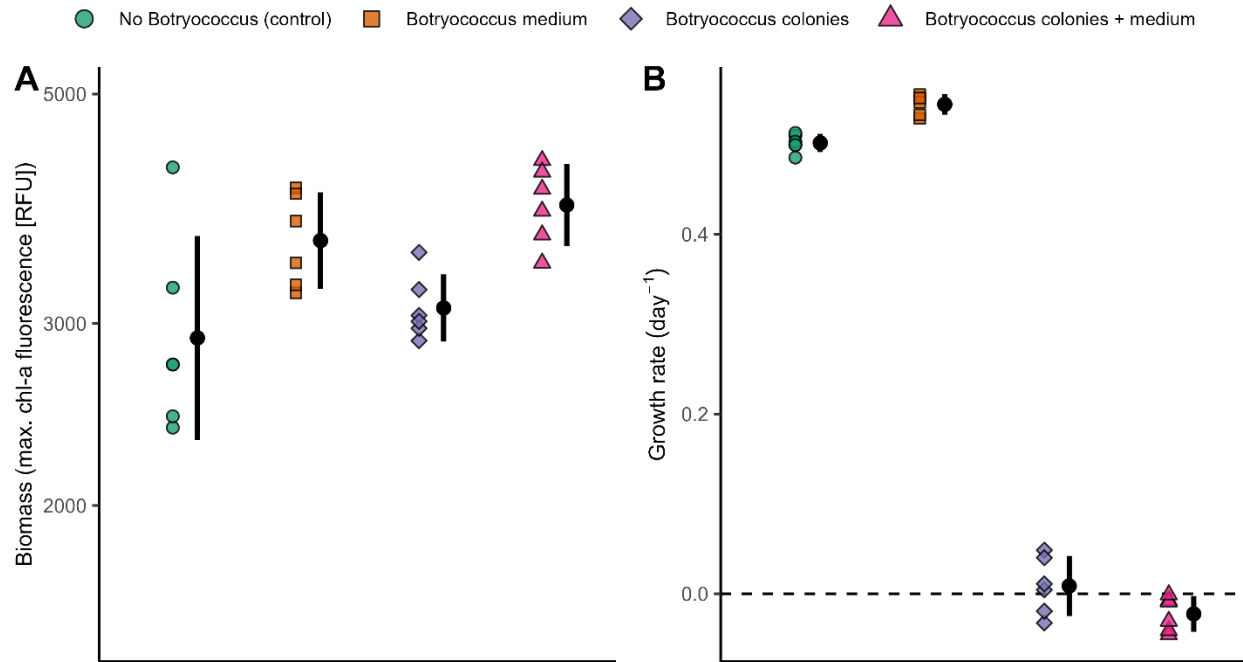


Fig. S1. Biomass in terms of maximum chl-a fluorescence (A) and initial day 0-3 growth rates (B) for different *B. braunii* treatments when no grazer is present. Points are data for individual replicates; black bars show mean and 95% CI per treatment.