

Supplementary Materials: *Daphnia magna* Exudates Impact Physiological and Metabolic Changes in *Microcystis aeruginosa*

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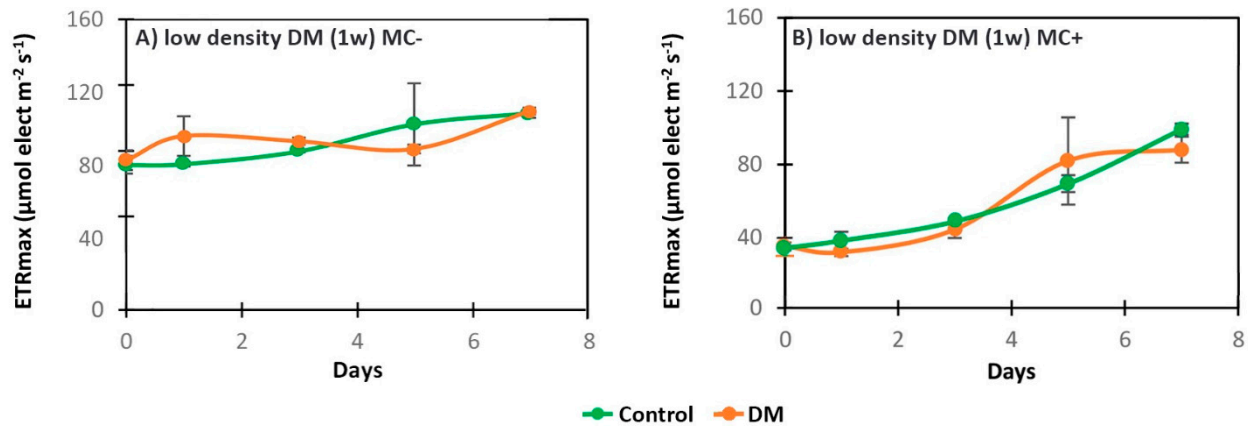


Figure S1. Photosynthetic activity of MC- and MC+ when cultured in *D. magna* spent medium (DM) and cultured in BG11 (Control): (A) low density DM (1w) MC- (B) low density DM (1w) MC+.

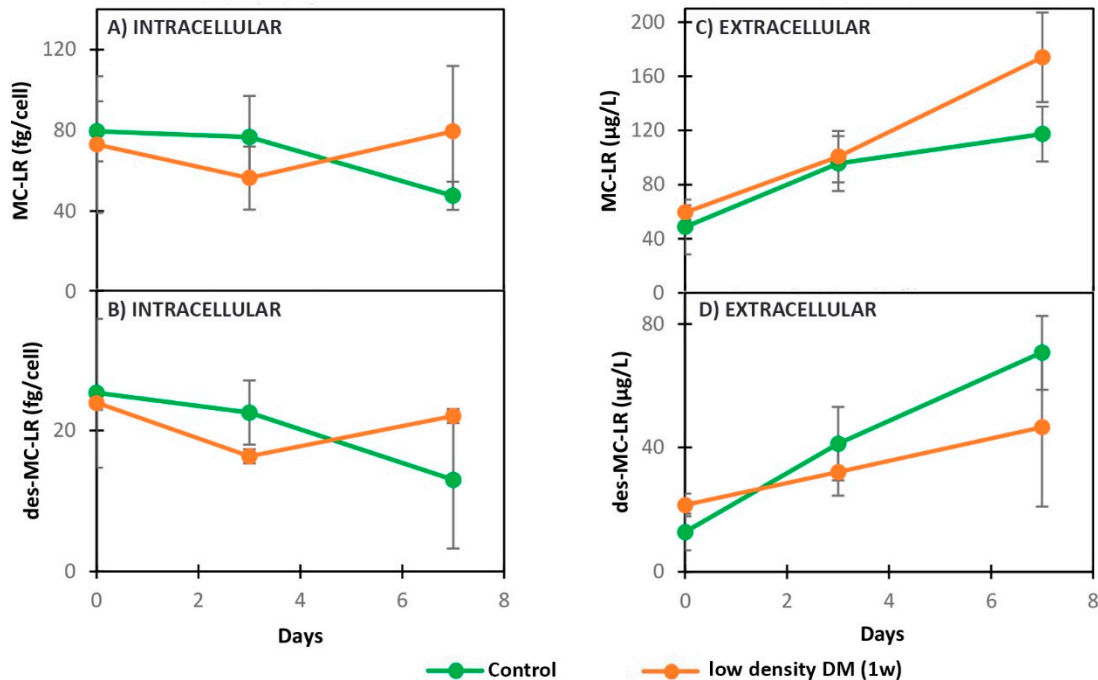


Figure S2. Dynamics of intracellular and extracellular metabolites in MC+ when exposed to low density DM (1w) compared to when grown in BG11 (Control): (A) intracellular MC-LR, (B) intracellular des-MC-LR, (C) extracellular MC-LR, (D) extracellular des-MC-LR. ($p > 0.05$) *t*-test.

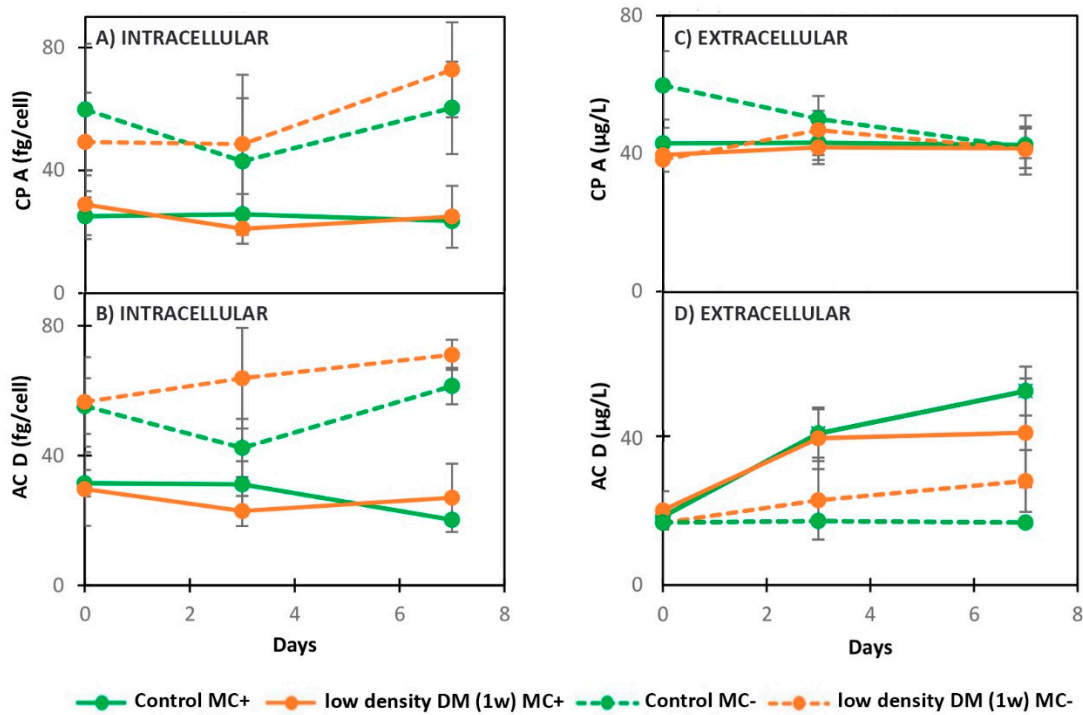


Figure S3. Dynamics of intracellular and extracellular metabolites in MC+ and MC- when exposed to low density DM (1w): *M. aeruginosa* PCC7806 (low density DM (1w) MC+) and *M. aeruginosa* PCC7806 *mcy-* (low density DM (1w) MC-) and when grown in BG11: *M. aeruginosa* PCC7806 (Control MC+) and *M. aeruginosa* PCC7806 *mcy-* (Control MC-). (A) intracellular CP A, (B) intracellular AC D, (C) extracellular CP A, (D) extracellular AC D. ($p > 0.05$) *t*-test.

Table S1. Concentration of PO₄ (mg/L) and NO₃ (mg/L) on the day 0 in the 2wDM experiment.

	Day 0	
	PO ₄ (mg/L)	NO ₃ (mg/L)
2wDM MC+ Control	4.20 ± 0.35	173.09 ± 25.43
2wDM MC+ Treatment	4.16 ± 0.15	200.66 ± 22.36
2wDM MC- Control	4.50 ± 0.09	248.46 ± 3.81
2wDM MC- Treatment	4.24 ± 0.17	232.85 ± 2.46

Table S2. pH on the day 0 in the 1wDM, 2wDM and 24 h DM.

Day 0	
	pH
1wDM MC+ Control	8.20 ± 0.10
1wDM MC+ Treatment	8.23 ± 0.16
1wDM MC- Control	8.19 ± 0.02
1wDM MC- Treatment	8.24 ± 0.04
2wDM MC+ Control	8.19 ± 0.02
2wDM MC+ Treatment	8.25 ± 0.08
2wDM MC- Control	8.14 ± 0.05
2wDM MC- Treatment	8.18 ± 0.08
24hDM MC+ Control	8.17 ± 0.06
24hDM MC+ Treatment	8.18 ± 0.08
24hDM MC- Control	8.18 ± 0.02
24hDM MC- Treatment	8.17 ± 0.06