

Supplementary Materials: Effects of Microcystin-LR on Metabolic Functions and Structure Succession of Sediment Bacterial Community under Anaerobic Conditions

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Table S1. The concentrations of MC-LR for different samples with different incubation time (mg/L).

| Time / h | Control | G0 | G1 | G2 | G3 |
|----------|-------------|-------------|-------------|-------------|-------------|
| 0 | 1.00 ± 0.03 | 1.00 ± 0.04 | 1.00 ± 0.02 | 1.00 ± 0.03 | 1.00 ± 0.01 |
| 12 | 1.07 ± 0.05 | 0.89 ± 0.05 | 0.79 ± 0.03 | 0.70 ± 0.06 | 0.65 ± 0.03 |
| 24 | 0.99 ± 0.03 | 0.87 ± 0.03 | 0.73 ± 0.03 | 0.58 ± 0.05 | 0.51 ± 0.04 |
| 36 | 1.05 ± 0.04 | 0.85 ± 0.07 | 0.70 ± 0.07 | 0.50 ± 0.04 | 0.37 ± 0.04 |
| 48 | 0.92 ± 0.04 | 0.74 ± 0.05 | 0.57 ± 0.04 | 0.34 ± 0.02 | 0.22 ± 0.04 |
| 60 | 0.94 ± 0.04 | 0.74 ± 0.04 | 0.42 ± 0.06 | 0.27 ± 0.04 | 0.14 ± 0.03 |
| 72 | 0.86 ± 0.04 | 0.66 ± 0.05 | 0.37 ± 0.04 | 0.15 ± 0.03 | 0.08 ± 0.02 |
| 84 | 0.93 ± 0.07 | 0.54 ± 0.04 | 0.24 ± 0.02 | 0.11 ± 0.03 | 0.04 ± 0.01 |
| 96 | 0.92 ± 0.05 | 0.48 ± 0.04 | 0.19 ± 0.06 | 0.05 ± 0.02 | 0.00 ± 0.00 |
| 108 | 0.97 ± 0.04 | 0.36 ± 0.05 | 0.16 ± 0.05 | 0.00 ± 0.00 | 0.00 ± 0.00 |
| 120 | 0.95 ± 0.05 | 0.26 ± 0.08 | 0.08 ± 0.03 | 0.00 ± 0.00 | 0.00 ± 0.00 |
| 132 | 0.97 ± 0.04 | 0.21 ± 0.04 | 0.03 ± 0.02 | 0.00 ± 0.00 | 0.00 ± 0.00 |
| 144 | 1.01 ± 0.05 | 0.18 ± 0.03 | 0.00 ± 0.00 | 0.00 ± 0.00 | 0.00 ± 0.00 |
| 156 | 0.94 ± 0.05 | 0.16 ± 0.03 | 0.00 ± 0.00 | 0.00 ± 0.00 | 0.00 ± 0.00 |
| 168 | 0.95 ± 0.04 | 0.13 ± 0.03 | 0.00 ± 0.00 | 0.00 ± 0.00 | 0.00 ± 0.00 |

Data are shown as mean values ± standard deviation (SD) ($n = 3$).

Table S2. Utilization of various carbon sources by the sediment bacterial communities in different samples after 168 h of incubation.

| Samples | Carbohydrates | Amino Acids | Polymers | Phenolic Compounds | Amines | Carboxylic Acids |
|---------|---------------|--------------|-------------|--------------------|-------------|------------------|
| G0 | 0.71 ± 0.04 | 0.84 ± 0.09 | 1.03 ± 0.10 | 0.47 ± 0.07 | 0.80 ± 0.16 | 0.66 ± 0.09 |
| G1 | 0.67 ± 0.07 | 0.36 ± 0.04* | 0.70 ± 0.01 | 0.28 ± 0.05 | 0.59 ± 0.04 | 0.36 ± 0.05 |
| G2 | 0.37 ± 0.17 | 0.23 ± 0.13* | 0.45 ± 0.22 | 0.19 ± 0.17 | 0.34 ± 0.08 | 0.33 ± 0.06 |
| G3 | 0.18 ± 0.04 | 0.30 ± 0.05* | 0.39 ± 0.09 | 0.08 ± 0.07* | 0.22 ± 0.02 | 0.32 ± 0.05 |

Data are shown as mean values ± SD ($n = 3$), * $p < 0.05$ (sample G0 versus MC-LR treated samples).