**Table 1.** Environmental variables and ecological indexes recorded during the microcosms experiment (mean ± SD).

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
|  |  | **Day 0** | **Day 2** | **Day 21** | **Day 35** | **Day 70** |
| **T (ºC)** | C | 26.1 ± 0.1 | 27.8 ± 0.1 | 22.0 ± 0.1 | 19.7 ± 0.2 | 16.9 ± 0.0 |
|  | T-W | 26.3 ± 0.2 | 27.9 ± 0.2 | 22.5 ± 0.5 | 19.8 ± 0.1 | 16.9 ± 0.1 |
|  | T-S | 26.2 ± 0.1 | 27.8 ± 0.1 | 22.0 ± 0.5 | 19.7 ± 0.2 | 17.5 ± 1.3 |
| **pH** | C | 8.7 ± 0.1 | 8.7 ± 0.1 | 8.9 ± 0.0 | 9.9 ± 0.0 | 9.1 ± 0.4 |
|  | T-W | 8.7 ± 0.0 | 8.8 ± 0.1 | 8.9 ± 0.0 | 9.9 ± 0.1 | 8.9 ± 0.0 |
|  | T-S | 8.7 ± 0.0 | 8.7 ± 0.1 | 8.9 ± 0.0 | 9.9 ± 0.0 | 8.9 ± 0.0 |
| **O2 (mg/l)** | C | 6.5 ± 0.2 | 6.6 ± 0.2 | 7.5 ± 0.0 | 7.6 ± 0.1 | 8.4 ± 0.1 |
| T-W | 6.5 ± 0.1 | 6.6 ± 0.1 | 7.4 ± 0.1 | 7.5 ± 0.1 | 8.3 ± 0.1 |
| T-S | 6.4 ± 0.2 | 5.8 ± 1.6 | 7.4 ± 0.1 | 7.6 ± 0.1 | 8.3 ± 0.1 |
| **Cond. (mS/cm)** | C | 5.98 ± 0.04 | 5.98 ± 0.05 | 6.71 ± 0.66 | 6.37 ± 0.96 | 6.91 ± 0.81 |
| T-W | 5.96 ± 0.01 | 5.97 ± 0.03 | 6.30 ± 0.04 | 6.65 ± 0.06 | 7.10 ± 0.47 |
| T-S | 5.94 ± 0.04 | 5.89 ± 0.20 | 6.25 ± 0.12 | 6.22 ± 0.85 | 6.55 ± 0.67 |
| **TDS**  **(g/l)** | C | 2.99 ± 0.02 | 2.99 ± 0.02 | 3.19 ± 0.06 | 3.22 ± 0.44 | 3.38 ± 0.33 |
| T-W | 2.98 ± 0.00 | 2.99 ± 0.01 | 3.15 ± 0.02 | 3.32 ± 0.03 | 3.47 ± 0.08 |
| T-S | 2.97 ± 0.02 | 2.98 ± 0.01 | 3.11 ± 0.05 | 3.13 ± 0.43 | 3.28 ± 0.33 |
| **TP**  **(µg/l)** | C | 776.4 ± 35.9 | 715.5 ± 44.5 | 464.9 ± 28.7 | 393.3 ± 26.9 | 437.3 ± 59.7 |
| T-W | 733.7 ± 61.4 | 549.4 ± 94.7 | 298.4 ± 25.5 | 261.6 ± 74.1 | 209.5 ± 24.6 |
| T-S | 763.9 ± 59.4 | 574.2 ± 141.4 | 277.3 ± 26.4 | 252.2 ± 54.7 | 190.0 ± 48.0 |
| **TN**  **(mg/l)** | C | 4.42 ± 0.22 | 3.45 ± 0.40 | 3.14 ± 0.29 | 3.22 ± 0.41 | 2.75 ± 0.46 |
| T-W | 4.15 ± 0.47 | 3.77 ± 0.33 | 3.46 ± 0.36 | 3.13 ± 0.71 | 3.02 ± 0.53 |
| T-S | 4.08 ± 0.28 | 3.82 ± 0.28 | 4.18 ± 0.42 | 3.45 ± 0.45 | 3.23 ± 0.38 |
| **Chl *a***  **(µg/l)** | C | 63.1 ± 27.6 | 48.0 ± 15.9 | 27.9 ± 14.4 | 30.9 ± 10.5 | 26.6 ± 22.3 |
| T-W | 62.8 ± 10.1 | 39.1 ± 16.7 | 57.4 ± 20.2 | 45.0 ± 26.2 | 28.1 ± 19.4 |
| T-S | 71.6 ± 19.5 | 44.8 ± 35.1 | 43.6 ± 33.0 | 29.7 ± 13.5 | 34.9 ± 35.9 |
| **Smg** | C | 0.50 ± 0.17 | 0.42 ± 0.09 | 0.66 ± 0.16 | 0.48 ± 0.05 | 0.35 ± 0.09 |
|  | T-W | 0.29 ± 0.19 | 0.26 ± 0.12 | 0.58 ± 0.12 | 0.52 ± 0.10 | 0.52 ± 0.13 |
|  | T-S | 0.42 ± 0.06 | 0.36 ± 0.02 | 0.57 ± 0.04 | 0.49 ± 0.13 | 0.26 ± 0.08 |
| **H’** | C | 1.83 ± 0.50 | 1.53 ± 0.41 | 1.67 ± 0.61 | 1.73± 0.37 | 1.36± 0.64 |
|  | T-W | 1.40 ± 0.81 | 1.44 ± 0.47 | 1.51 ± 0.51 | 1.97 ± 0.42 | 1.86 ± 0.42 |
|  | T-S | 1.91 ± 0.33 | 1.45 ± 0.53 | 1.45 ± 0.35 | 1.94 ± 0.43 | 1.32 ± 0.29 |
| **J** | C | 0.71 ± 0.13 | 0.66 ± 0.09 | 0.56 ± 0.19 | 0.66 ± 0.15 | 0.55 ± 0.23 |
|  | T-W | 0.59 ± 0.29 | 0.77± 0.07 | 0.52 ± 0.17 | 0.69 ± 0.13 | 0.68 ± 0.13 |
|  | T-S | 0.80 ± 0.13 | 0.66 ± 0.26 | 0.51 ± 0.13 | 0.68 ± 0.18 | 0.66 ± 0.07 |
| **D** | C | 0.39 ± 0.15 | 0.44 ± 0.14 | 0.48 ± 0.21 | 0.42 ± 0.13 | 0.56 ± 0.23 |
|  | T-W | 0.48 ± 0.24 | 0.46 ± 0.15 | 0.52 ± 0.17 | 0.35 ± 0.11 | 0.36 ± 0.15 |
|  | T-S | 0.31 ± 0.09 | 0.48 ± 0.22 | 0.54 ± 0.13 | 0.31 ± 0.06 | 0.48 ± 0.11 |
| **Jc** | C *vs* T-W | 0.71 | 0.75 | 0.61 | 0.92 | 0.75 |
|  | C *vs* T-S | 0.71 | 0.67 | 0.75 | 1.00 | 0.73 |
|  | T-W *vs* T-S | 1.00 | 0.86 | 0.69 | 0.92 | 0.54 |

**Table 2.** Results of the repeated-measures ANOVA. df= degrees of freedom.

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | TREATMENT | | | |  | TIME | | | |  | TREATMENT\*TIME | | | |
|  | df1 | df2 | F | p |  | df1 | df2 | F | p |  | df1 | df2 | F | p |
| T | 2 | 12 | 0.6 | ns |  | 1.6 | 18.8 | 2015.4 | <0.001 |  | 3.1 | 18.8 | 1.3 | ns |
| pH | 2 | 12 | 1.4 | ns |  | 1.1 | 13.7 | 281.5 | <0.001 |  | 2.3 | 13.7 | 0.8 | ns |
| O2 | 2 | 12 | 0.8 | ns |  | 1.1 | 13.1 | 66.5 | <0.001 |  | 2.2 | 13.1 | 1.1 | ns |
| Cond | 2 | 12 | 1.4 | ns |  | 1.3 | 15.9 | 9.8 | <0.001 |  | 2.7 | 15.9 | 0.6 | ns |
| TDS | 2 | 12 | 0.5 | ns |  | 1.0 | 12.5 | 14.6 | <0.001 |  | 2.1 | 12.5 | 0.4 | ns |
| TP | 2 | 12 | 25.8 | <0.001 |  | 1.9 | 22.6 | 224.5 | <0.001 |  | 3.8 | 22.6 | 3.5 | <0.005 |
| TN | 2 | 12 | 4.4 | ns |  | 4.0 | 48.0 | 18.9 | <0.001 |  | 8.0 | 48.0 | 2.0 | ns |
| Chl *a* | 2 | 7 | 0.7 | ns |  | 4.0 | 28.0 | 4.3 | <0.005 |  | 8.0 | 28.0 | 1.7 | ns |
| Zooplankton abundance | 2 | 7 | 2.1 | ns |  | 4.0 | 28.0 | 4.7 | <0.005 |  | 8.0 | 28.0 | 0.9 | ns |
| Smg | 2 | 7 | 1.5 | ns |  | 4.0 | 28.0 | 10.3 | <0.001 |  | 8.0 | 28.0 | 3.2 | <0.05 |
| H’ | 2 | 7 | 0.0 | ns |  | 4.0 | 28.0 | 1.6 | ns |  | 8.0 | 28.0 | 0.7 | ns |
| J | 2 | 7 | 0.2 | ns |  | 4.0 | 28.0 | 1.4 | ns |  | 8.0 | 28.0 | 0.5 | ns |
| D | 2 | 7 | 0.1 | ns |  | 2.1 | 14.7 | 1.4 | ns |  | 4.2 | 14.7 | 0.6 | ns |
| Dubois | 2 | 7 | 0.1 | ns |  | 4.0 | 28.0 | 1.4 | ns |  | 8.0 | 28.0 | 0.6 | ns |
| TSITP | 2 | 12 | 25.3 | <0.001 |  | 2.4 | 28.3 | 190.5 | <0.001 |  | 4.7 | 28.3 | 7.7 | <0.001 |
| TSITN | 2 | 12 | 4.0 | <0.05 |  | 2.5 | 30.0 | 15.8 | <0.001 |  | 5.0 | 30.0 | 1.5 | ns |
| TSIChl a | 2 | 7 | 0.4 | ns |  | 4.0 | 28.0 | 4.8 | <0.005 |  | 8.0 | 28.0 | 2.1 | ns |
| TSIROT | 2 | 6 | 0.7 | ns |  | 4.0 | 24.0 | 10.8 | <0.001 |  | 8.0 | 24.0 | 1.7 | ns |
| TSICR1 | 2 | 8 | 0.4 | ns |  | 4.0 | 32.0 | 1.0 | ns |  | 8.0 | 32.0 | 1.4 | ns |
| TSICR2 | 2 | 8 | 0.6 | ns |  | 4.0 | 32.0 | 0.9 | ns |  | 8.0 | 32.0 | 1.6 | ns |

**Table 3.** List of zooplankton species recorded along the experiment. C: Common species (present 100% of the experimental time); F: Frequent species (present 80% of the experimental time); O: Occasional species (present 60% of the experimental time); and R: Rare species (present ≤ 40% of the experimental time).

|  |  |  |  |
| --- | --- | --- | --- |
|  | **C** | **T-W** | **T-S** |
| ***Anuraeopsis* sp.** | C | C | C |
| ***Brachionus angularis*** | C | C | C |
| ***Brachionus calyciflorus*** | C | C | C |
| ***Brachionus plicatilis* L** | C | C | C |
| ***Brachionus plicatilis* SM** | C | C | C |
| ***Cephalodella* sp.** | R | R | R |
| ***Colurella* sp.** | O | O | O |
| ***Lecane* sp.** | R | R | R |
| ***Hexarthra oxyuris*** | O | R | R |
| ***Keratella quadrata*** | C | C | C |
| ***Testudinella* sp.** | R | R | R |
| ***Trichocerca* sp.** | R | O | O |
| ***Alona rectangula*** | C | C | F |
| **N + C** | C | C | C |
| ***Acanthocyclops* sp.** | C | C | C |
| ***Megacyclops gigas*** | F | C | C |