Table S1. Summary of experimental conditions as well as the measured maximum (TWmax) and final (TWfinal) TW concentrations.

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| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Experiment ID | electrolyte | particulates [mg/kg] - type | duration [days] | pH initial | pH range | TWinitial x104 [cells/kg] | TWmax x104 [cells/kg] | TWfinal x104 [cells/kg] | factor increase rel. to biotic ctrl | observation |
| TW1 1 | IO + 100 % f/2 | biotic ctrl | 6.6 | 8.20 | 8.2-9.4 | 1.87 ± 0.04 | 45.72 ± 1.57 | 45.72 ± 1.57 |  | exp. Growth |
| TW1 2 | IO + 100 % f/2 | 500 MS | 6.6 | 8.22 | 8.2-9.3 | 1.77 ± 0.08 | 47.20 ± 0.32 | 47.20 ± 0.32 | 1.03 ± 0.04 | exp. Growth |
| TW1 3 | IO + 100 % f/2 | 500 ICE | 6.6 | 8.23 | 8.2-9.3 | 1.67 ± 0.14 | 55.20 ± 1.67 | 55.20 ± 1.67 | 1.21 ± 0.05 | exp. Growth |
| TW1 4 | IO + 100 % f/2 | 500 MS | 6.6 | 8.20 | 8.2-8.4 | abiotic ctrl |  |  |
| TW1 5 | IO + 100 % f/2 | 500 ICE | 6.6 | 8.18 | 8.2-8.4 | abiotic ctrl |  |   |
| TW2 1  | IO + 5 % f/2 | biotic ctrl | 21.8 | 8.34 | 8.1-8.6 | 0.99 ± 0.03 |  7.90 ± 0.51 |  4.77 ± 0.03 |  | exp. Growth |
| TW2 1b | IO + 5 % f/2 | biotic ctrl BIG | 21.8 | 8.35 | 8.2-8.5 | 0.96 ± 0.05 | 12.62 ± 0.63 | 10.51 ± 0.53 |  | exp. Growth |
| TW2 2 | IO + 5 % f/2 | 500 MS | 21.8 | 8.35 | 8.2-8.5 | 0.99 ± 0.01 | 15.16 ± 0.64 | 14.02 ± 0.22 | 1.92 ± 0.08 | exp. Growth |
| TW2 2b | IO + 5 % f/2 | 500 MS BIG | 21.8 | 8.35 | 8.2-8.6 | 0.92 ± 0.05 | 17.96 ± 0.90 | 16.60 ± 0.83 | 1.42 ± 0.07 | exp. Growth |
| TW2 3 | IO + 5 % f/2 | 500 ICE | 21.8 | 8.35 | 8.2-8.5 | 0.94 ± 0.01 | 10.46 ± 0.43 |  8.39 ± 0.43 | 1.32 ± 0.08 | exp. Growth |
| TW2 3b | IO + 5 % f/2 | 500 ICE BIG | 21.8 | 8.35 | 8.1-8.5 | 1.05 ± 0.05 | 14.93 ± 0.75 | 14.04 ± 0.70 | 1.18 ± 0.07 | exp. Growth |
| TW2 4 | IO + 5 % f/2 | 75 MS | 21.8 | 8.36 | 8.3-8.5 | 0.94 ± 0.06 |  8.43 ± 1.42 |  5.60 ± 0.99 | 1.07 ± 0.18 | exp. Growth |
| TW2 5 | IO + 5 % f/2 | 75 ICE | 21.8 | 8.37 | 8.3-8.5 | 0.94 ± 0.13 |  8.37 ± 0.53 |  7.14 ± 1.20 | 1.06 ± 0.09 | exp. Growth |
| TW2 6 | IO + 5 % f/2 | 500 MS | 21.8 | 8.35 | 8.4-8.5 | abiotic ctrl |  |  |
| TW2 7 | IO + 5 % f/2 | 500 ICE | 21.8 | 8.35 | 8.3-8.5 | abiotic ctrl |  |  |
| TW2 8 | IO + 5 % f/2 | 75 MS | 21.8 | 8.34 | 8.3-8.5 | abiotic ctrl |  |  |
| TW2 9 | IO + 5 % f/2 | 75 ICE | 21.8 | 8.35 | 8.2-8.5 | abiotic ctrl |  |   |
| TW3 1 | IO | biotic ctrl | 27.7 | 8.32 | 8.3-8.4 | 1.08 ± 0.01 | 1.08 ± 0.01 | 0.12 ± 0.03 |  | no growth |
| TW3 2 | IO | 500 MS | 27.7 | 8.31 | 8.3-8.4 | 0.95 ± 0.03 | 1.66 ± 0.10 | 1.59 ± 0.28 | 13.55 ± 0.31\* | linear growth |
| TW3 3 | IO | 500 ICE | 27.7 | 8.31 | 8.2-8.4 | 0.82 ± 0.05 | 0.92 ± 0.04 | 0.74 ± 0.05 |  6.30 ± 0.26\* | linear growth |
| TW3 4 | IO | 100 MS | 27.7 | 8.32 | 8.3-8.4 | 0.95 ± 0.07 | 0.99 ± 0.04 | 0.45 ± 0.08 |  3.86 ± 0.31\* | initially lin. growth |
| TW3 5 | IO | 100 ICE | 27.7 | 8.32 | 8.2-8.4 | 0.88 ± 0.06 | 0.88 ± 0.06 | 0.25 ± 0.05 |  2.16 ± 0.32\* | initially lin. growth |
| TW3 6 | IO | 500 MS | 27.7 | 8.30 | 8.3-8.4 | abiotic ctrl |  |  |
| TW3 7 | IO | 500 ICE | 27.7 | 8.32 | 8.2-8.4 | abiotic ctrl |  |  |
| TW3 8 | IO | 100 MS | 27.7 | 8.31 | 8.3-8.4 | abiotic ctrl |  |  |
| TW3 9 | IO | 100 ICE | 27.7 | 8.32 | 8.2-8.3 | abiotic ctrl |  |   |
| TW4 1 | IO + 5 % f/2 | biotic ctrl | 21.8 | 8.44 | 8.3-8.4 | 0.86 ± 0.06 | 6.83 ± 0.45 | 3.17 ± 0.36 |  | exp. Growth |
| TW4 2 | IO + 5 % f/2 | 750 MS | 21.8 | 8.43 | 8.3-8.6 | 0.81 ± 0.09 | 8.67 ± 0.34 | 7.01 ± 0.68 | 1.27 ± 0.08 | exp. Growth |
| TW4 3 | IO + 5 % f/2 | 750 ICE | 21.8 | 8.44 | 8.2-8.4 | 0.65 ± 0.06 | 7.08 ± 0.79 | 5.40 ± 0.53 | 1.04 ± 0.13 | exp. Growth |
| TW4 4 | IO + 5 % f/2 | 250 MS | 21.8 | 8.44 | 8.3-8.5 | 0.91 ± 0.03 | 7.54 ± 0.16 | 4.49 ± 0.11 | 1.10 ± 0.07 | exp. Growth |
| TW4 5 | IO + 5 % f/2 | 250 ICE | 21.8 | 8.44 | 8.2-8.4 | 0.70 ± 0.05 | 7.39 ± 0.42 | 4.01 ± 0.71 | 1.08 ± 0.09 | exp. Growth |
| TW4 6 | IO + 5 % f/2 | 750 MS | 21.8 | 8.43 | 8.4-8.6 | abiotic ctrl |  |  |
| TW4 7 | IO + 5 % f/2 | 750 ICE | 21.8 | 8.43 | 8.2-8.5 | abiotic ctrl |  |  |
| TW4 8 | IO + 5 % f/2 | 250 MS | 21.8 | 8.44 | 8.4-8.6 | abiotic ctrl |  |  |
| TW4 9 | IO + 5 % f/2 | 250 ICE | 21.8 | 8.44 | 8.2-8.5 | abiotic ctrl |  |   |
| TW5 1 | IO | biotic ctrl | 21.0 | 8.10 | 8.1-8.4 | 0.89 ± 0.06 | 0.89 ± 0.06 | 0.27 ± 0.04 |  | no growth |
| TW5 2 | IO | 750 MS | 21.0 | 8.09 | 8.1-8.4 | 0.73 ± 0.01 | 2.14 ± 0.16 | 2.14 ± 0.16 | 7.87 ± 0.16\* | linear growth |
| TW5 3 | IO | 750 ICE | 21.0 | 8.09 | 8.1-8.4 | 0.67 ± 0.04 | 1.50 ± 0.26 | 1.16 ± 0.10 | 4.25 ± 0.17\* | linear growth |
| TW5 4 | IO | 250 MS | 21.0 | 8.10 | 8.1-8.4 | 0.76 ± 0.01 | 1.34 ± 0.08 | 0.78 ± 0.06 | 2.87 ± 0.17\* | initially lin. growth |
| TW5 5 | IO | 250 ICE | 21.0 | 8.10 | 8.1-8.4 | 0.70 ± 0.11 | 1.03 ± 0.16 | 0.33 ± 0.05 | 1.20 ± 0.20\* | initially lin. growth |
| TW5 6 | IO | 750 MS | 21.0 | 8.18 | 8.1-8.4 | abiotic ctrl |  |  |
| TW5 7 | IO | 750 ICE | 21.0 | 8.14 | 8.1-8.4 | abiotic ctrl |  |  |
| TW5 8 | IO | 250 MS | 21.0 | 8.14 | 8.1-8.4 | abiotic ctrl |  |  |
| TW5 9 | IO | 250 ICE | 21.0 | 8.14 | 8.1-8.4 | abiotic ctrl |  |   |

\*In experimental series TW3 and TW5, where no exponential growth occurred, the factor relative to the biotic control is based on the final TW concentration and not on the maximal concentration as for experimental series TW1, TW2 and TW4 where exponential growth occurred.