

Metadata for the data produced and analyzed for the article:

Filtration of Nordic recirculating aquaculture system wastewater: effects on microalgal growth, nutrient removal and nutritional value

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The data processed and analyzed in this study is divided in five files: Growth_and_Nutrient_removal.txt, FA_concentration.txt, FA_proportion.txt, AA_concentration.txt and AA_proportion.txt. For detailed descriptions of the motives, methods and results of the study, see the article.

In the file Growth_and_Nutrient_removal.txt, the first column indicates the algal species studied: HP = *Haematococcus pluvialis*, MG = *Monoraphidium griffithii*, SE = *Selenastrum* sp.. Column 2 indicates the treatment, WW = unfiltered RAS wastewater, FWW = filtered RAS wastewater. Column 3 represents the experimental run (1-2, for further details, see materials and methods in the article). Columns 4 – 7 are density, specific growth rate, biomass and chlorophyll a (respectively) and they correspond to Figure 1 a-d (respectively) of the article. Columns 8 – 11 are percentage of nitrogen removed, percentage of phosphate removed, nitrogen removal rate and phosphate removal rate (respectively) and they correspond to Figure 2 a-d (respectively) of the article.

In the file FA_concentration.txt, the first column indicates the species: HP = *Haematococcus pluvialis*, MG = *Monoraphidium griffithii*, SE = *Selenastrum* sp.. Column 2 indicates the treatment, WW = unfiltered RAS wastewater, FWW = filtered RAS wastewater. Column 3 represents the experimental run (1-2, see materials and methods). Columns 4 – 21 are the microalgal fatty acid concentrations identified through GC-MS that corresponded to more than > 0.5% of the total fatty acid concentration. The concentration of each fatty acid is given in µg of fatty acid per mg of microalgae dry weight. Sum of all ω – 3 and ω – 6 fatty acids are represented in the figures 3 b and d (respectively) of the article. Column 22 indicates the ratio between the sum of all ω – 3 and ω – 6 fatty acids. Column 23 – 27 indicate actinobacterial fatty acids identified by GC-MS in microalgal samples. The value given to each of these fatty acids represents the concentration in ng of fatty acid per mL of filtered microalgae media. The sum of all actinobacterial fatty acid values were used to produce figure 6 of the article.

In the file FA_proportion.txt, the first column indicates the species: HP = *Haematococcus pluvialis*, MG = *Monoraphidium griffithii*, SE = *Selenastrum* sp.. Column 2 indicates the treatment, WW = unfiltered RAS wastewater, FWW = filtered RAS wastewater. Columns 3 – 7 represent the proportion of each ω – 3 fatty acid to the total ω – 3 fatty acids, calculated as: $(\text{concentration of } \omega - 3 \text{ fatty acid } [I]) / (\text{total concentration of } \omega - 3 \text{ fatty acids})$, with $[I]$ representing any ω – 3 fatty acid. Columns 8 - 12 represent the proportion of each ω – 6 fatty acid to the total ω – 6 fatty acids, calculated as: $(\text{concentration of } \omega - 6 \text{ fatty acid } [I]) / (\text{total concentration of } \omega - 6 \text{ fatty acids})$, with $[I]$ representing any ω – 6 fatty acid. Proportion values of ω – 3 and ω – 6 fatty acids were used to perform PERMANOVA analysis. PERMANOVA results are represented in Table 2 of the article, and results

of Permutational Analysis of Multivariate Dispersion (PERMDISP) of the proportion data are presented in the Table 3 of the article.

In the file AA_concentration.txt, the first column indicates the species: HP = *Haematococcus pluvialis*, MG = *Monoraphidium griffithii*, SE = *Selenastrum* sp.. Column 2 indicates the treatment, WW = unfiltered RAS wastewater, FWW = filtered RAS wastewater. Column 3 represents the experimental run (1-2, see materials and methods). Columns 4 – 18 are the microalgal amino acid concentration identified through GC-MS. The concentration of each amino acid is given in μg of fatty acid per mg of microalgae dry weight. Columns 19 and 20 represent the sum of the concentration of all essential amino acids and non-essential amino acids, respectively. Mean microalgal essential and non-essential amino acids concentration values are represented in the Figure 4 b of the article.

In the file AA_proportion.txt, the first column indicates the species: HP = *Haematococcus pluvialis*, MG = *Monoraphidium griffithii*, SE = *Selenastrum* sp. Column 2 indicates the treatment, WW = unfiltered RAS wastewater, FWW = filtered RAS wastewater. Columns 3 – 10 represent the proportion of each essential amino acid to the total essential amino acids, calculated as: $(\text{concentration of essential amino acid } [I]) / (\text{total concentration of essential acids})$, with $[I]$ representing any essential amino acid. Columns 11 - 17 represent the proportion of each non-essential amino acid to the total non-essential amino acids, calculated as: $(\text{concentration of non – essential amino acid } [I]) / (\text{total concentration of non – essential acids})$, with $[I]$ representing any non-essential amino acid. Proportion values of essential and non-essential amino acids were used to perform PERMANOVA analysis. PERMANOVA results are represented in Table 2 of the article, and results of Permutational Analysis of Multivariate Dispersion (PERMDISP) of the proportion data are presented in the Table 3 of the article.