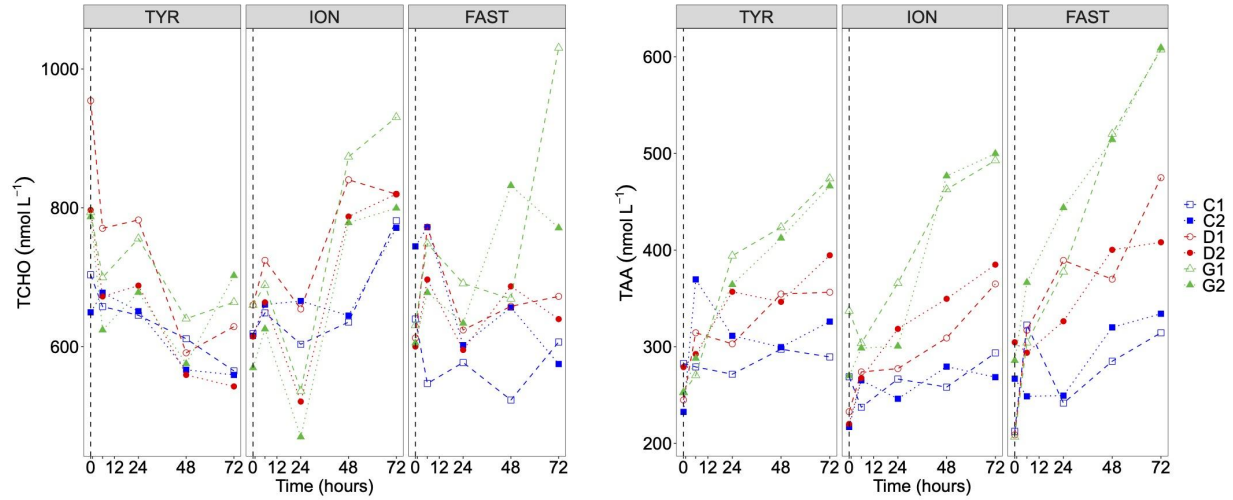


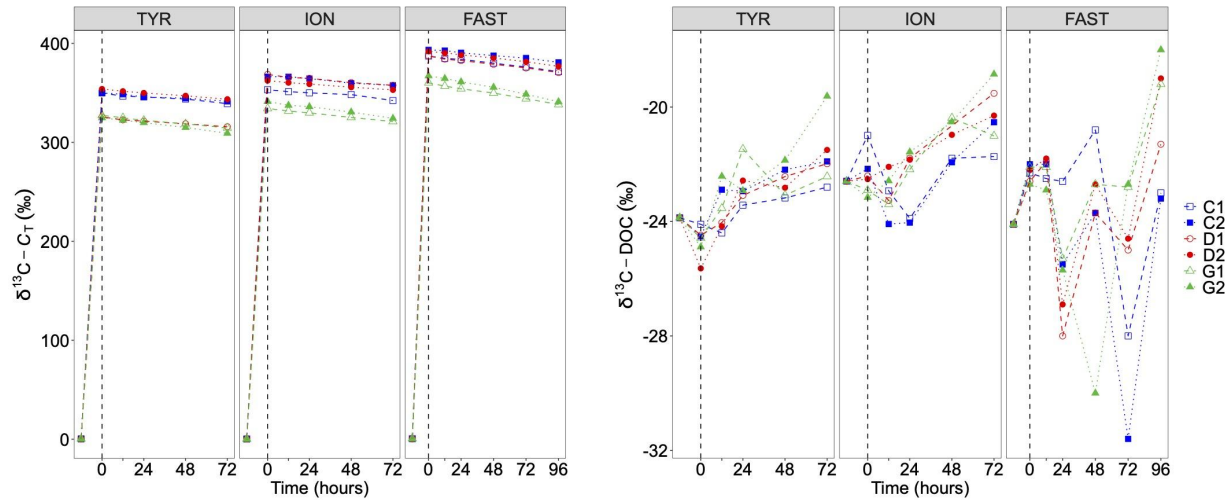
1335

1336 Fig. S1. Scheme of an experimental tank.



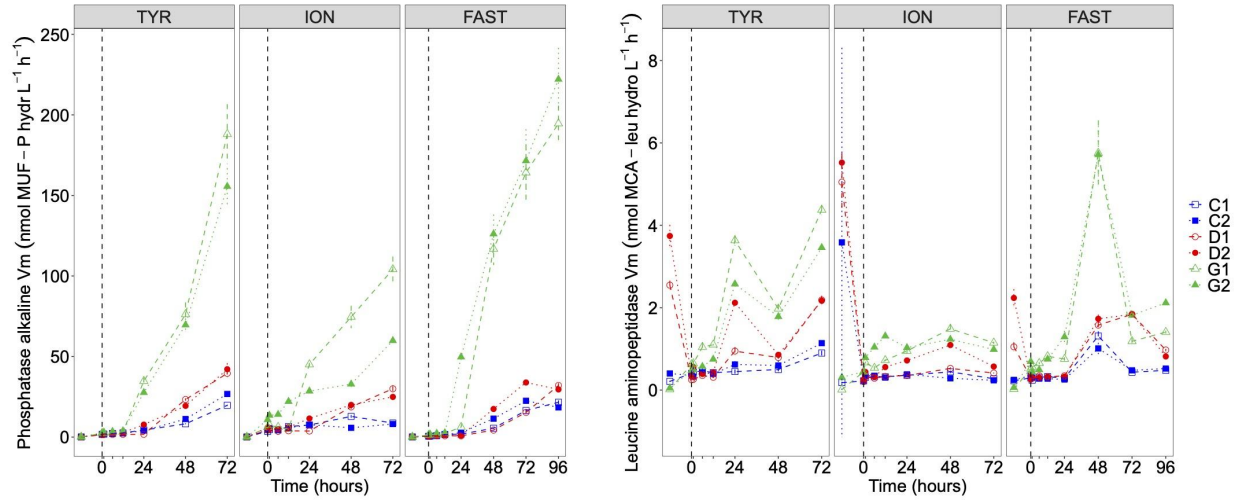
1337

1338 Fig. S2. Total hydrolysable carbohydrate (TCHO) and amino acids (TAA) concentrations in the
 1339 six tanks (controls: C1, C2; dust addition under present conditions of temperature and pH: D1,
 1340 D2; dust addition under future conditions of temperature and pH: G1 and G2) during the three
 1341 experiments (TYR, ION and FAST). The dashed vertical line indicates the time of seeding (after
 1342 t_0).



1343

1344 Fig. S3. Isotopic signature of dissolved inorganic carbon ($\delta^{13}\text{C}-\text{C}_T$) and incorporation of ^{13}C into
 1345 dissolved organic carbon ($\delta^{13}\text{C}-\text{DOC}$) in the six tanks (controls: C1, C2; dust addition under
 1346 present conditions of temperature and pH: D1, D2; dust addition under future conditions of
 1347 temperature and pH: G1 and G2) during the three experiments (TYR, ION and FAST). The
 1348 dashed vertical line indicates the time of seeding (after t_0).



1349

1350 Fig. S4. Maximum hydrolysis velocity (V_m) of the phosphatase alkaline and leucine
 1351 aminopeptidase (over 1-2 h incubations) on samples taken in the six tanks (controls: C1, C2; dust
 1352 addition under present conditions of temperature and pH: D1, D2; dust addition under future
 1353 conditions of temperature and pH: G1 and G2) during the three experiments (TYR, ION and
 1354 FAST).