EFFECTS OF INCREASED CO_2 IN THE CARBON BUDGET AND THE PHOTOSYNTHETIC YIELD OF THE ARCTIC SEAWEEDS *ALARIA ESCULENTA* AND *DESMARESTIA ACULEATA*

The physiological acclimation to increased pCO_2 (1300 ppm) of two common Arctic seaweeds from Kongsfjord (Svalbard) was analysed under laboratory conditions after 7 days of incubation. Growth rate changed in both species as a result of a reorganization of the carbon budget of the cell. Since increased CO_2 have the potential to modify physiological mechanisms in different ways for each species, it is expected that it may lead to changes at the seaweeds community level that could alter the whole food web.