Marine Biology

Warming has stronger direct than indirect effects on benthic microalgae in a seaweed system

in spring

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Electronic Supplementary Material 1

In a series of experiments in 2014/15 both *F. vesiculosus* thalli and ceramic tiles were deployed in benthic mesocosms and were sampled in parallel. Shown are the community composition and the mean relative contribution (%) of microalgal species to total biomass on the surface of *F. vesiculosus* and on ceramic tiles in ambient conditions after four weeks of experimental runtime in February 2014. Sample size (N) was six



Electronic Supplementary Material 2

Shown are the diversity indices (mean \pm CI) of the microalgal community on the surface of ceramic tiles and on *F. vesiculosus*. Sample size (N) was six.



Electronic Supplementary Material 3

Shown is the total biomass accumulation (mean \pm CI) of benthic microalgae on the surface of ceramic tiles and *F. vesiculosus* in ambient conditions after four weeks of experimental runtime (February 2014). Biomass is shown as biovolume calculated as pg C per 1 tile or per 1 g DW of *F. vesiculosus*. Sample size (N) was six. It has to be noted that this comparison has to be treated with caution as 1 g DW of *F. vesiculosus* only represents an approximation of the surface area of the ceramic tiles (4.5 x 4.5cm).

