

Interactive comment on "The effect of salinity, light regime and food source on C and N uptake in a kleptoplast-bearing foraminifera" by Michael Lintner et al.

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Thank you very much for your input and your ideas. Major Concerns: We added some SEM pictures and clarified this. Discussion: The part with Lopez was rephrased; also we added this suggested literature; we used this algae because we had stable cultures from both algae at our laboratory. Therefore we were able to produce isotopic labelled food sources. Another argument was, that D. tertiolecta is frequently used in other studies and so we were able to compare and discuss these results better. We fed with 5 mg algae per cristallisation dish and used a light intensity of 30 μ mol photons m-2 s-1. We added this information to the text. All minor-comments were considered in the

C1

new manuscript version.

Materials: Line 106: Light penetration depth was added. Line 131: The experiments started 4 days after the sampling of the sediment. Line 142: Food addition was 5 mg per cristallisation dish at the beginning of the experiments. After the experiments sufficient food still remained in the dishes so food was not a limiting factor. Line 145: We used 30 μ mol photonen m-2 s-1 from a fluorenscent tube. Line 151: 20 foraminifera were used for 1 data point. At each combination of time and salinity we produced 3 data points (triplicates). We noticed no breakup of the tests during the washing steps, therefore we could say there was no loss of C and N.

Results: We increased the size and added the information to tab. 2.

Discussion: Line 321/331: Text was adapted. Line 336: We agree that we cannot state this, but that's the reason why we "assumed" it – to avoid misunderstanding, we rephrased this part. Line 353: The number of chloroplasts plays a minor role for food uptake – we changed the text here. Line 368: At this point we were just discussing the food preference of E. excavatum. Of course they are not able to obtain kleptoplasts from dead diatoms. Foraminifera can just use chloroplasts from living benthic diatoms.

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