Responses to anonymous referee 1

Dear editor and reviewers,

The authors would like to greatly thank the anonymous referee for his/her interest of our work. You will find below our responses to his/her valuable comments.

Specific comments:

Material & Methods: Please described in detail from which stations clone libraries were gained. This is not clear to me only from Fig. 1. What is the meaning of both RNA based pufM libraries in Fig. 1?

We give this information more clearly in the new version. The legend of Fig. 1 has been modified because the former was not appropriate.

Fig. 2 and also within the text (4432, line 1): To my knowledge Erythrobacter is an alpha-4, Roseovarius an alpha-3 proteobacterium, not vice versa. Please check this and change accordingly.

Sorry for this mistake! We made the modifications accordingly.

Page 4437, line 24: Please mention the transcripts which were analysed in these studies, they differ from pufM.

We add in the text that the transcripts analysed in these studies were *nifH* and *amoA*.

Technical comments:

Page 4437, line 16: : : :BChl-a synthesis: : : Page 4438, line 29: : : : abundance. Moreover: : : Table 2: Roseovarius halotolerans

All technical comments have been taken into account.