

## ***Interactive comment on “Effect of ocean acidification on otolith development in larvae of a tropical marine fish” by P. L. Munday et al.***

**Anonymous Referee #1**

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General comments: Overall, this is an interesting paper detailing a well-conceived and executed experiment examining the impacts of decreased pH and increased CO<sub>2</sub> on the otolith formation of a reef fish. Few studies have addressed this issue so this paper is an important contribution. I just have some relatively minor comments that should be addressed before the paper is finalised.

Specific comments: Section 2.1 -Clarification: It was not clear how many larvae were available for these analyses. I note that some of the sample sizes for some parts of the experiment were low (i.e. otolith chemistry analysis).

Section 2.4 -Again, the sample size used here was not obvious, although it says “one otolith chosen at random from each fish”. Figure 3 indicates that the number of samples analyses was quite low? Is there a reason more otoliths were not analysed for their

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chemistry? An explanation in the text would be useful.

Discussion -It would have been useful if some of the differences between right and left otoliths that were seen (Table 3) were discussed here.

Technical corrections: Section 2.1 -Misspelling: “On discovering a new clutch of egg”

Section 2.2 -Millero et al. 2006-not cited in reference section

Section 2.3 -“When required”...this sounds a bit awkward and maybe it could be rephrased.

Section 2.4 -Fitzgerald et al. 2004-not cited in reference section

References -There seem to be quite a few errors in the reference section that need to be correct. For example, there are papers listed out of order (the C and D sections have become mixed up), papers cited here but not in the text (Palmer and Srobeck 1986 and Payan et al. 1998) and formatting errors (some papers citing journal articles have the title all in capital letters while most do not).

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