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Feeding and thermal conditioning enhance coral temperature tolerance in juvenile *Pocillopora acuta*

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Article citation details

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Review timeline

Original submission: Revised submission: Final acceptance: 14 April 2021 29 April 2021 6 May 2021

Note: Reports are unedited and appear as submitted by the referee. The review history appears in chronological order.

Note: This manuscript was transferred from another Royal Society journal with peer review.

Review History

Decision letter (RSOS-210644.R0)

We hope you are keeping well at this difficult and unusual time. We continue to value your support of the journal in these challenging circumstances. If Royal Society Open Science can assist you at all, please don't hesitate to let us know at the email address below.

Dear Dr Huffmyer

On behalf of the Editors, we are pleased to inform you that your Manuscript RSOS-210644 "Feeding and thermal conditioning enhance coral temperature tolerance in juvenile *Pocillopora acuta*" has been accepted for publication in Royal Society Open Science subject to minor revision in accordance with the referees' reports. Please find the referees' comments along with any feedback from the Editors below my signature.

We invite you to respond to the comments and revise your manuscript. Below the referees' and Editors' comments (where applicable) we provide additional requirements. Final acceptance of your manuscript is dependent on these requirements being met. We provide guidance below to help you prepare your revision.

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Thank you for submitting your manuscript to Royal Society Open Science and we look forward to receiving your revision. If you have any questions at all, please do not hesitate to get in touch.

Kind regards, Royal Society Open Science Editorial Office Royal Society Open Science openscience@royalsociety.org

on behalf of Dr Cynthia Downs (Associate Editor) and Pete Smith (Subject Editor) openscience@royalsociety.org

Associate Editor Comments to Author (Dr Cynthia Downs):

Associate Editor

Comments to the Author:

I reviewed this manuscript, the reviewer comments from Proc B, and the response to the reviewer comments. The authors have made sufficiently address the reviewers' comments and I enjoyed reading this well-written manuscript of a well-designed study. The changes broaden the implication of the research by putting it into a broader framework and support the results since they are robust to different statistical frameworks. I have no major edit and only one minor comment. Change the colors in Fig 5 to match those in Fig 3 & 4.

===PREPARING YOUR MANUSCRIPT===

Your revised paper should include the changes requested by the referees and Editors of your manuscript. You should provide two versions of this manuscript and both versions must be provided in an editable format:

one version identifying all the changes that have been made (for instance, in coloured highlight, in bold text, or tracked changes);

a 'clean' version of the new manuscript that incorporates the changes made, but does not highlight them. This version will be used for typesetting.

Please ensure that any equations included in the paper are editable text and not embedded images.

Please ensure that you include an acknowledgements' section before your reference list/bibliography. This should acknowledge anyone who assisted with your work, but does not qualify as an author per the guidelines at https://royalsociety.org/journals/ethics-policies/openness/.

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Please ensure that you include a summary of your paper at Step 2 'Type, Title, & Abstract'. This should be no more than 100 words to explain to a non-scientific audience the key findings of your research. This will be included in a weekly highlights email circulated by the Royal Society press office to national UK, international, and scientific news outlets to promote your work.

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1) One version identifying all the changes that have been made (for instance, in coloured highlight, in bold text, or tracked changes);

2) A 'clean' version of the new manuscript that incorporates the changes made, but does not highlight them.

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-- If you have uploaded ESM files, please ensure you follow the guidance at

https://royalsociety.org/journals/authors/author-guidelines/#supplementary-material to include a suitable title and informative caption. An example of appropriate titling and captioning may be found at https://figshare.com/articles/Table_S2_from_Is_there_a_trade-off_between_peak_performance_and_performance_breadth_across_temperatures_for_aerobic_sc ope_in_teleost_fishes_/3843624.

At Step 7 'Review & submit', you must view the PDF proof of the manuscript before you will be able to submit the revision. Note: if any parts of the electronic submission form have not been completed, these will be noted by red message boxes.

Author's Response to Decision Letter for (RSOS-210644.R0)

See Appendix A.

Decision letter (RSOS-210644.R1)

We hope you are keeping well at this difficult and unusual time. We continue to value your support of the journal in these challenging circumstances. If Royal Society Open Science can assist you at all, please don't hesitate to let us know at the email address below.

Dear Dr Huffmyer,

It is a pleasure to accept your manuscript entitled "Feeding and thermal conditioning enhance coral temperature tolerance in juvenile Pocillopora acuta" in its current form for publication in Royal Society Open Science. The comments of the reviewer(s) who reviewed your manuscript are included at the foot of this letter.

Please ensure that you send to the editorial office an editable version of your accepted manuscript, and individual files for each figure and table included in your manuscript. You can send these in a zip folder if more convenient. Failure to provide these files may delay the processing of your proof. You may disregard this request if you have already provided these files to the editorial office.

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Thank you for your fine contribution. On behalf of the Editors of Royal Society Open Science, we look forward to your continued contributions to the Journal.

Kind regards, Anita Kristiansen Editorial Coordinator

Royal Society Open Science openscience@royalsociety.org

on behalf of Dr Cynthia Downs (Associate Editor) and Pete Smith (Subject Editor) openscience@royalsociety.org

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Appendix A

Associate Editor Comments to Author (Dr Cynthia Downs): Associate Editor Comments to the Author:

I reviewed this manuscript, the reviewer comments from Proc B, and the response to the reviewer comments. The authors have made sufficiently address the reviewers' comments and I enjoyed reading this well-written manuscript of a well-designed study. The changes broaden the implication of the research by putting it into a broader framework and support the results since they are robust to different statistical frameworks. I have no major edit and only one minor comment. Change the colors in Fig 5 to match those in Fig 3 & 4.

We thank the associate editor for their positive review of our manuscript and thank the previous reviewers for comments that have improved our manuscript. In this revision, we have changed the colors of Fig 5 to match those in Fig 3 and 4 by using color to denote feeding treatment (orange = fed, purple = unfed) and using line type to denote temperature treatment (solid = ambient, dotted = cool). We have revised the figure captions to reflect this change in color. We hope that our manuscript is now suitable for publication in Royal Society Open Science.