Review of: "Damsels in a Hidden Colour: Development of Ultraviolet Sensitivity and Colour Patterns in Damselfishes (Pomacentridae)"

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Potential competing interests: No potential competing interests to declare.

I think this study is an interesting fusion of optics and genetics. This work has been undertaken to a high standard. I only have a few minor comments that might improve the text slightly. I also have a few questions in my list.

1.) Change to - fish have evolved

2.) Do you have any measurements regarding the level of UV light transmitted at the depth at which these fish inhabit, and could you mention the depth at which they regularly operate / live etc.? This may help to understand the developmental pressures on the need to develop such structures, i.e., nearer the surface, the UV will be more intense.

3.) Change to - Damselfish express different

4.) Change to - In adult damselfish, single..

5.) Change to - that these small fish..

6.) There may be a difference in the effect of UV light transmission in comparison to salt water.

7.) You might have gathered that I prefer the use of fish as the plural rather than fishes by now.

8.) Change to - at least in the human visible spectrum….

9.) Change to - In these, the UV…

10.) Change to - allowed to acclimatise…

11.) The violet circle highlights what, where the spectrum was measured?

12.) Change to - would differ in their spectral response…

13.) Change to - and N. melas..

14.) Is there any difference in the pattern, i.e., between dots and wavy lines, between males and females?

15.) Does courtship of the damselfish involve display near the surface and movements that would show off these UV reflective features?