

Specific comments on the manuscript:

## INTRODUCTION

Line 25: The name of one of the bivalves is incorrect, probably a spelling/auto-corrector issue, however according to WoRMS (<http://www.marinespecies.org/aphia.php?p=taxdetails&id=140299>) is *Macra stultorum* not *Macra sultorum*. Check throughout the manuscript

Line 28: Mention which sequence did you use (i.e. 18S rDNA, mitochondrial COI)

Line 41: You state that you will be using the word polyps instead of scyphistomae, however throughout the manuscript you keep using both words, choose one and be consistent.

44: Spelling error in the word “larvae”

Line 54: For the focus of the manuscript, the whole paragraph about environmental factors that influence the reproduction of polyps is not relevant. As you are focusing on the finding of the polyps in situ and not how the environment affects them.

Line 55: If you are using “such as” then there is no need to have “for example” in the same sentence. It is repetitive. Chose one or the other.

Line 69: spelling error for “mitochondrial CO” should be COI

Line 70: The aim could be more focus to the fact of finding the polyps in situ than the environmental factors have in the polyp’s reproduction as you mention in lines 54-57 and mention which approaches you are using (i.e. COI and 18S rRNA). I consider that the aim of your manuscript should be more focused in the fact that you find polyps and podocysts in the field and were able to identify them to species level using molecular approaches.

## MATERIALS & METHODS

Follow the methodology of van Walraven et al 2016

How deep was the dredging were you found the polyps/podocysts at Doggerbank

Line 85: binocular microscope?

Line 87: The term “cups” does not apply, I suggest vials: Eppendorf “vials”.

Line 91: The collection of shells was done only once? Have you tried to collect shells during different times frames? Maybe after a storm?

Line 98: need re write

Line 105: Which methods did you follow to do the genetic analysis/extraction?

Line 106: Here you said Eppendorf “tube” Choose either vial or tube and be consistent throughout the manuscript

Line 119: Missing a space between V5 region and the reference Hadziavdic et al 2014

## RESULTS

Line 137: why that one podocysts could not be measured?

Line 139: Spelling error in *Aequepectem opercularis*, according to WoRMS

(<http://www.marinespecies.org/aphia.php?p=taxdetails&id=140687>) should be *Aequipecten opercularis*

Line 146: delete “similar to the Dogger Bank cysts”

Line 148: Sentence of “DNA concentrations...” must be in methods sections not results

## DISCUSSION

Line 180: Also consider that *Aurelia* is widely distributed and highly invasive (Dawson, 2004; Bayha and Graham, 2014) therefore, the presence of *Aurelia aurita* polyps in anthropogenic structures as Van Walraven et al 2016 reported could explain a competition for *Cyanea* and *Chrysaora* to attach in different substrates such as shells, as you describe

Line 187-189: The sentence where you talk about the study of Holst & Jarms, 2010 is not well related to the rest of the paragraph, as you are talking about the podocysts and that study is about polyps. Other reference is needed (check Kawahara et al 2012; Thein et al 2013)

Line 193-208: The whole idea is good; however it needs better connection in the ideas and better structure/flow.

## GENERAL

Are there any observations of ephyrae in the field study area?

## FIGURES

Figure 1: Mention the process of strobilation when you give details for the scyphistomae forming strobila (letter G)

Figure 4: Show with arrows empty and filled cysts and identify which podocysts belong to each species

Figure 5 and 6: change the colour of the new sequences, the light blue is very hard to read on screen

## REFERENCES

- BAYHA, K. M. & GRAHAM, W. M. 2014. Nonindigenous Marine Jellyfish: Invasiveness, Invasibility, and Impacts. *In*: PITT, K. A. & LUCAS, C. H. (eds.) *Jellyfish Blooms*. Dordrecht: Springer Netherlands.
- DAWSON, M. N. 2004. Macro-morphological variation among cryptic species of the moon jellyfish, *Aurelia* (Cnidaria: Scyphozoa). *Marine Biology*, 144, 203-203.
- KAWAHARA, M., OHTSU, K. & UYE, S. I. 2012. Bloom or non-bloom in the giant jellyfish *Nemopilema nomurai* (Scyphozoa: Rhizostomeae): roles of dormant podocysts. *Journal of Plankton Research*, 35, 213-217.
- THEIN, H., IKEDA, H. & UYE, S.-I. 2013. Ecophysiological characteristics of podocysts in *Chrysaora pacifica* (Goette) and *Cyanea nozakii* Kishinouye (Cnidaria: Scyphozoa: Semaestomeae): effects of environmental factors on their production, dormancy and excystment. *Journal of experimental marine biology and ecology*, 446, 151-158.