

Doyle et al experimentally exposed *Tridacna maxima* to changes in water particle movement through underwater sound (motorboat noise) and increased water flow to determine whether these stimuli, individually or together, modified risk assessment or caused distraction. This study is interesting and relevant as many of the marine organisms are exposed human disturbances such as noise pollution and wave action from boat traffic, but how marine organisms respond to these disturbances is not well understood. This study should be acceptable for publication after addressing some comments.

Title - Different giant clam species have different shell morphology and have different ways of responding to distractions, e.g., not all species are able to fully close their shells when distracted. The title should specify the species of the giant clam used in the experiment, *Tridacna maxima*.

Lines 31, 293 - Closing of giant clam shells is not only demonstrating a response from a predator risk, shell closure response could also be caused by suspension of sediments, among others. In fact there are predators that do not induce giant clams to close their shells. However, authors may suggest that future experiments should be conducted to examine giant clam response from predator risk.

Introduction

104 – “fully closed their mantle” – Do you mean that clams closed their shells?

Methods

114 - Have you assessed response of *T. maxima* individuals that were not exposed to any of the treatments (underwater boat noise, increase water flow and combination of the two)?

114-116 – The previous treatment might have an additive effect with the next treatment. Is one day or three days enough for the clams to recover from stress from the previous treatment? Have you tried exposing them back to previous treatment and see if result was similar?

116-121 – Aside from making sure that the water was both clear during pre and post plume, did you also check other water quality between pre and post plume (e.g. salinity, nutrient concentration) that may affect clams' responses?

125 - Indicate model number, as some pumps might produce stronger vibrations.

156 - For the control, did you leave the hose and speaker beside the clam during observation?

164 - During this 60 s acclimation period, we counted the number of mantle twitches (partial retractions). How many twitches have you counted during the 60 s acclimation period. This information (raw data) can be presented as supplementary material. A sample video showing the partial retractions would also help readers to understand what you meant by mantle twitches or partial retractions.

167 - How did you measure latency to close? Sometimes, *Tridacna maxima* individuals do not fully close their shells when distracted. Did you only measure latency to close when *T. maxima* individuals fully close their shells? Actual data on latency to close can be presented as supplementary material. Indicate how long was the video recording for each clam individual.

168 - How did you measure latency to re-open? For how long did you measure latency to re-open, is it over 60 s from the time you rubbed the clam mantle with a pencil eraser? Actual data on latency to re-open can be presented as supplementary material.

Over one day, how many *T. maxima* individuals were you able to expose to the four treatments and able to observe their response? How far are the *T. maxima* individuals from each other? Was the study site in a reef flat? Indicate the time interval between observations of different *T. maxima* individuals.

Also indicate the time of observation? Did you conduct observations in the morning and afternoon? Any light differences between observation times?

How far is the pump from the giant clam? Did you put the main pump in small boat? How did you control the effect of vibrations from the pump?

177-178 – have you observed any organisms during the experiment that might affect the mantle retraction or reemergence (e.g., fish)?

Discussion

265 – What is the unisensory receptor in clams? The palps?
Please explain how *T. maxima* perceive or sense sounds.

280-286: Take note that unlike other bivalves where filter feeding is essential as a source of nutrition, adult giant clams rely most of its nutrition to its photosynthesizing symbionts. They should keep their valves open to expose their mantle to light and also to return to their normal functions such as filtering of water.

293-294 – Mention some of these negative effects on other bivalves. What behavior or responses did they focus on?

299 to 302 - It has not been tested whether the filtering capacity of giant clams can indeed control eutrophication.

303-304 – Perhaps mention this in the introduction. This will help readers understand more about modalities.

310 – Can you expound on the single sensory channel used by clams?

314-315- what is multi-attribute and how does it differ with multimodalities?

Figure 1c. - AB and AC. Are you referring to B and C?