

Interactive comment on "Near-future levels of ocean acidification do not affect sperm motility and fertilization kinetics in the oyster *Crassostrea gigas*" by J. N. Havenhand and P. Schlegel

W.-X. Yang (Referee)

wxyang@spermlab.org

Received and published: 10 November 2009

This is a well-written and very interesting paper studying on the effects of near-future levels of ocean acidification on sperm swimming speed, sperm motil1ity, and fertilization kinetics in a population of the Pacific oyster Crassostrea gigas from western Sweden. The authors discussed the importance of sound experimental design and power analysis in accurate interpretation of onsignificant results. The design of this work is good. The authors have followed appropriate ethical guidelines. The paper adheres to the scope of the journal BG and has considerable scientific significance.

I only have some minor comments, and I thus recommend publication of this paper in

C2930

BG after a minor revision.

- 1. In the "Introduction" part, please point out the exact scientific issue(s) the authors tried to resolve in this report. Is there any hypothesis for this paper? If no hypothesis, why the authors designed all these experiments?
- 2. How long can the sperm keep on swimming in FSW (control) and in the experimental group? It will be good if the authors make a table to show this.
- 3. Although the English writing is very good, I suggest the authors to check the grammar carufully before submitting revision.

Interactive comment on Biogeosciences Discuss., 6, 4573, 2009.