

International Conference on

AQUACULTURE & MARINE BIOLOGY

June 25-27, 2018 | Rome, Italy

Maternal antibody transfer from broodstock to eggs and larvae in Tiger grouper (*Epinephelus fuscoguttatus*)

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Maternal antibodies from Tiger grouper (*Epinephelus fuscoguttatus*) broodstocks to eggs and larval were evaluated following vaccination with inactivated *Vibrio harveyi*. Tiger grouper broodstock (mean BW 8.66 ± 0.09 kg, n=19) were immunised intraperitoneally (IP) and followed by a booster two weeks post vaccination, while control non-immunised broodstock were injected IP with PBS. The serum antibody level against *V.harveyi* was monitored two weeks post vaccination and monthly up to 5 months post vaccination. This study showed that immunized broodstock showed significantly ($P<0.05$) higher in specific IgM antibody level against *V. harveyi* as compared to control, which in turn induced a marked increased ($p<0.05$) in specific antibody in their eggs and larvae. The lysozymes activity also showed a significant higher ($P<0.05$) in broodstocks and their eggs throughout 5 months study while in larvae, lysozymes level only showed a significant higher ($P<0.05$) in 3th month post vaccination post vaccination. The findings

from this study suggested inactivated *V.harveyi* vaccines able to stimulate the immune response in broodstock and passively transferred to their eggs and larvae.



Biography

Rafidah Othaman is a senior lecturer of aquaculture at Borneo Marine Research Institute (BMRI) of Universiti Malaysia Sabah (UMS). She has received her PhD from University Putra Malaysia in 2013. Her research interest is on immunology and aquatic diseases.

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