

Passive maternal antibody transfer to eggs and larvae of tiger grouper (*Epinephelus fuscoguttatus*)

ABSTRACT

The immune response of Tiger grouper (*E. fuscoguttatus*) broodstocks and its passive transfer of maternal antibodies to eggs and larvae were evaluated following vaccination with an inactivated *V.harveyi*. Tiger grouper broodstock (mean BW 8.66 ± 0.09 kg, n=19) were vaccinated intraperitoneally (IP) and followed by a booster two weeks post vaccination, while Controlled Non-vaccinated (CG) broodstock were IP injected with PBS. The serum antibody level against *V.harveyi* was monitored for two weeks on post-vaccination and monthly up to 5 months post-vaccination. This study showed that the Vaccinated Group (VG) broodstock induced significantly ($P<0.05$) higher in specific IgM antibody level against *V.harveyi* as compared to the CG, which in turn induced a marked increased ($P<0.05$) in specific IgM in eggs and larvae produced from VG broodstock at 14 weeks post vaccination. The findings from this study suggested that inactivated *V.harveyi* vaccines were able to stimulate the immune response in broodstock and passively transferred the maternal antibody to their eggs and larvae.