**FIGURES**



**FIGURE A1**

Arrhenius plot (ln rate versus 1/T) for the oxygen consumption data of juvenile and adult crab. Arrhenius temperature: juvenile crab: 5902±257 K (n=5; R2=0.99); adult crab: 6639±997K (n=5; R2=0.94). Average Arrhenius temperature: 6270K.



**FIGURE A2**

Temporal variation in water temperature and feed level in the experimental integrated multi-trophic aquaculture pond.



**FIGURE A3**

Temporal variation of temperature dependent function k(T) of the *Portunus trituberculatus* DEB model and density of *Portunus trituberculatus* in the experimental integrated multi-trophic aquaculture pond