

ABSTRACT

The ovary development of female mud crab (*Scylla serrata*) was evaluated by various eyestalk ablation and differences of nutrition quality. In hence the ovary development was evaluated by two kind of response variables, Gonado Somatic Index (GSI) and Ovary Fecundity (OF). Ablated treatments were as follow : A_0 is intact individu as a control; A_1 is one eyestalk ablation individu and A_2 is two eyestalk ablation individu. Diet treatments were as follow : B_1 is 25 % natural diet and 75 % formulated diet, B_2 is 50 % natural diet and 50 % formulated diet and B_3 is 75 % natural diet and 25 % formulated diet. Nine experimental combination of treatments were replicated with eight times in every groups. The body weigt female crab samples of 151 - 174 gram. After 14 days left, the gonadal maturation were observated. Results further showed that eyestalk ablation females gave no effect in Ovary Fecundity but gave effect on Gonado Somatic Index. The A_2 treatment gave the best effects on Gonado Somatic Index and Ovary Fecundity. The nutritional quality gave effects on Gonado Somatic Index and Ovary Fecundity. The B_1 treatment gave the best effects on Gonado Somatic Index and Ovary Fecundity. But the interaction between eyestalk ablation and nutritional quality factors gave no effects on Gonado Somatic Index and Ovary Fecundity.