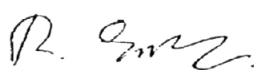


Ratree Sukswan 2006: Embryonic and Larval Development of Indonesian Bamboo Shark, *Chiloscyllium hasselti* Bleeker, 1852. Master of Science (Marine Science), Major Field: Marine Science, Department of Marine Science.
Thesis Advisor: Assistant Professor Teerapong Doungdee, M.S. 83 pages.
ISBN 974-16-2514-6

The Indonesian Bamboo Shark (*Chiloscyllium hasselti* Bleeker, 1852) is a species of shark, which can be reared and breed in captivity. The eggs are laid in tendrils and are often attached to ropes or other substrates. The oval-shaped eggs are golden brown in color. The average dimensions are 7.68 cm, 3.41 cm, and 1.62 cm in length, width, and thickness, respectively. With an average weight of 17.53 g, produce their eggs two at a time, over a two at week period. Approximately 68.4% of the eggs are hatched and the average incubation time is 84.93 days. The fertilized telolecithal eggs are characterized by high yolk percentage. The developing embryo receives nutrient from the yolk sac. The study is divided into two phrases: embryonic development and post-hatching stages. The embryonic development is divided into 10 stages, starting with the early stage (1) 0-72 hrs. of age. Following the early stage, in chronological order, are the head bud and tail bud stage (2) 3-6 days of age, organogenesis (3), vitelline vein 7-10 days (4), establishment of the blood system 10-15 days (5), breathing system 15-17 days (6), formation of the external organs 18-24 days (7), brain system 25-29 days (8), pigmentation 45-60 days (9), and black and white band stage more than 60 days (10), where the organs in full preparation for hatching. The post-hatching, or larval, development is divided into 6 stages, which begins with the newborn stage (1) and followed by the small juvenile (2), large juvenile (3), post juvenile (4), sub adult (5), adult stages (6). The study regarding the reproductive cycle revealed that male Indonesian Bamboo Shark reaches reproductive maturity at 2.5 year of age. In comparison, female Indonesian Bamboo Shark lays the first batch of eggs at the age of 1.5 year. Moreover, the average incubation temperature, salinity, and pH are $27.2 \pm 0.45^{\circ}\text{C}$, 32 ± 0.61 PSU, and 8.2 ± 0.09 , respectively. In addition, the average temperature, salinity, and pH for the rearing of the pups are $28.7 \pm 0.8^{\circ}\text{C}$, 32 ± 0.67 PSU, and 8.0 ± 0.09 respectively.



Student's signature



Thesis Advisor's signature

02 / 11 / 2006