

Theeranun Tapparuk 2009: Interaction Between Monogenean Parasites and Reproductive Biology of Ariid Catfish, in Songkhla Lake, Patalung Area. Master of Science (Fisheries Science), Major Field: Fisheries Science, Department of Fishery Biology. Thesis Advisor: Assistant Professor Thanitha Thapanand-Chaidee, Ph.D. 123 pages.

Interaction between monogenean parasites and reproductive biology of ariid catfish, in Songkhla Lake, Patalung area was determined. Study of primary reproductive biology was also taken. The length-weight relationship of *Arius maculatus* of male and female were $W = 0.0807SL^{2.4249}$ and $W = 0.1349 SL^{2.2552}$ respectively. Those of *Osteogeneiosus militaris* were $W = 0.0819SL^{2.3625}$ for male and $W = 0.8034 SL^{2.0698}$ for female, respectively. Similarly, sex ratio of *A. maculatus* and *O. militaris* from freshwater and brackish-water system were 1:1. Size at first maturity of female *A. maculatus* showed between 15 to 17 cm, and that of female *O. militaris* was between 18 to 22 cm. The gonadosomatic index of *A. maculatus* from freshwater had two reproductive periods per year, while only one time was shown in brackish-water system. Contrarily, *O. militaris* from freshwater system had one reproductive period a year, while in brackish-water system, the fish showed two reproductive periods a year.

Two genera of monogenean parasites were found on both *A. maculatus* and *O. militaris*, *Chauhanellus* and *Hamatopeduncularia*. The interaction between monogenean parasites and their hosts showed that the number and density were inversely varied by host gonadosomatic index. According to monogenean number and density, *Hamatopeduncularia* was potentially suitable to be biological indicator.

Student's signature

Thesis Advisor's signature