SURIANSYAH. Study on Gonad Development and Final Maturation of Climbing Perch (Anabas testudineus Bloch) by Hormonal Stimulation. Under the guidance of AGUS OMAN SUDRAJAT and MUHAMMAD ZAIRIN JUNIOR.

The purpose of this study was to evaluate the effect of water in oil in water (w/o/w) emulsion containing 17α-methyltestosterone on gonad development of climbing perch and to study the effect of ovaprim on final maturation of the fish. The results showed administration of 200 µg/kg 17α-methyltestosterone in w/o/w emulsion enhanced gonad development of climbing perch. In this treatment, testosterone concentration increased but estradiol-17β concentration decreased. Both hormones ranged 3.30-6.64 ng/dl and 0.96-5.66 ng/dl, respectively. This treatment also accelerated the development of egg diameter which were eggs ≥ 0.22 mm became 71.00% after 60 days, and development of egg nucleus position into terminal vesicle breakdown (GVBD) in day 60 was about 17.50%. On the other hand, experiment using ovaprim (LHRH-a + antidopamin) at the dose of ¼ ml/kg accelerated a courtship behaviour and spawning occurred at 3.3 and 4.3 hours after the courtship behaviour. Moreover, the treatment also increased gonadosomatic index (GSI) to about 2.72% and average final egg diameter equal to 90 mm.

Keywords: Climbing perch, Anabas testudineus, gonad development and maturation, 17α-methyltestosterone, ovaprim.