



The Effectiveness of Gonad Extract of Yellowfin Tuna Fish (*Thunnus albacares*) on Increase of Reproduction Factor of Nilem Carp (*O. hasselti*)

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Abstract : Nilem carp (*Osteoschilus hasselti*) one of tropical fish in Indonesian fresh water which is have a high economical value. The production of nilem carp seed depends on the availability of parent stock of mature gonad in great level of quantity and quality. One alternative way to accelerate gonad maturity is through hormonal therapy. This study employs four different treatments in terms of the dosage of induction of the extract and three repetitions. The main parameter being observed is estradiol 17 β (pg/ml), egg diameter (mm), Gonado Somatic Index (%), Hepato Somatic Index (%), and Gonad Histology, while the supporting parameter consists of temperature, pH value, and Dissolved Oxygen (DO) value. The best result is obtained through Treatment B (dosage of 0.7 ml/kg of nilem carp weight) with increase of estradiol 17 β up to 107.49 pg/ml, growth of diameter up to 0.95-1.25 mm, GSI value of 24.1%, and HSI value of 0.88%. The water quality during the study is normal with the temperature ranging from 28.00-31.00°C, pH value between 7.6-8.2, and DO level between 5.40-6.20 mg/L.
Keywords: estradiol 17- β , egg diameter, gonado somatic index, hepato somatic index, gonad histology, *Osteochilus hasselti*, *Thunnus albacores*.

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