

**USE OF SYNTHETIC HORMONE LHRH ANALOGUES AND OVAPRIM
TO INDUCE BREEDING OF *Catla catla* AND *Labeo rohita***

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Fishery industry plays a significant role in Sri Lankan economy contributing 1.2% to the Gross Domestic Production (GDP) in 2012. Inland fishery industry is one of the segments which are vital in further developments. Inland fisheries production has increased due to introduction of fingerlings to the reservoirs during past few years. Exotic species like *Catla catla* and *Labeo rohita* are popular among fishing communities and not naturally bred in reservoirs in Sri Lanka due to unfavorable environmental conditions. Therefore, induced breeding plays an important role when producing fingerlings for reservoirs. The experiment was conducted as a Completely Randomized Design (CRD) in two factor factorial arrangement (hormones; LHRH and Ovaprim and exotic fish species; *Catla catla* and *Labeo rohita*) to evaluate the hatchability and fertility rate from February to June 2013. The hormones were administered into the body of breeders using hypodermic syringe through intra peritoneal method. Females and males were injected with 0.5 mL/kg and 0.3 mL/kg

body weight (BW) doses of ovaprim respectively as a single dose. The 1st dose of LHRH for females and males were injected as 20 µg/kg and 15 µg/kg body weight BW respectively whereas 2nd dose of LHRH (10 µg/kg BW) was injected only to the females. Results showed that, interaction between breed and hormone was not significant ($p>0.05$). There was no significant difference ($p>0.05$) between the two hormones and breeds of fish on egg hatchability and fertility during the study period. Therefore, similar performances were observed in the use of LHRH and Ovaprim on induced breeding of Indian carps *Catla catla* and *Labeo rohita* specifically during February to June.

Key words: *Catla catla*, Hatchability, *Labeo rohita*, LHRH, Ovaprim