

EFFECTS OF TEMPERATURE AND HCG CONCENTRATION TO ARTIFICIAL REPRODUCTION FOR CATFISH *Ictalurus punctatus* (Rafinesque, 1818)

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Summary

The experiment was conducted to evaluate the effects of temperature and HCG gonadotropic concentration on the artificial reproduction of catfish (*Ictalurus punctatus*) in North Vietnam. HCG hormonal stimulants in 3 different doses of 900 UI (CT1), 1,200 UI (CT2) and 1,500 UI (CT3) were used to stimulate ovulation for 45 pairs of broodstock with the weight of 2.5 kg to 3 kg/fish. Results showed that the optimum dose of HCG to stimulate the reproduction of catfish was 1200 UI + 5 mg DOM / kg female, the effective duration when using HCG was 20-28 hours. The highest ovulation rate was 98.9%, while the fertilization and hatching rates were 86.3% and 83% respectively and deformity was low at the rate of 2.1%. The optimal temperature for artificial reproduction of Chennal catfish ranged from 24.5°C to 28°C.

Keywords: *Reproduction, HCG, catfish Ictalurus punctatus, temperature.*