ABSTRACT – Induced spawning of catfish, *Clarias batrachus*, was attempted using different doses of ovatide and ovaprim at varying latency period (interval between the time of injection and spawning). In both the sGnRH-based drugs, decreased doses with increased latency period gave better results of fertilization and hatching. Preparatory dose of ovaprim (male 0.1 ml/kg; female 0.5 ml/kg) administered intramuscularly 45 days prior to spawning for gonadal maturity resulted in higher rate of fertilization and hatching success. Optimum doses of ovaprim and ovatide were found to be 0.8-1.0 and 0.6-1.0 ml/kg body weight with latency period between 14-16 h.

*Key words:* Ovatide, ovaprim, induce spawning, *Clarias batrachus*. 