





## Comparative Study of Hormonal Stimulation of HCG, PG-extract and Ovaprim on Thermal Accumulation Period and Egg Production in Grass Carp Ctenopharyngodon idella

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## **Abstract**

Three types of hormonal stimulation were tried using HCG, PG extract and Ovaprim to induce egg production and accelerate thermal accumulation period (TAP). Results showed that there is a direct relationship between the type of hormones and TAP. Fish receiving PG-extract had the shortest TAP which was significantly different than those receiving HCG and Ovaprim treatments. Values ranged between 258.97, 344.67 and 322.78 C-hour in fish injected with PG extract, HCG and Ovaprim respectively. Results also showed noticeable variation in egg production in fish receiving various hormones with clear superiority for fish injected with PG-extract compared with those receiving HCG and Ovaprim. The lowest weight of extracted eggs was in fish injected with HCG (7.30 g/kg) and the highest in fish receiving the PG hormonal extract (139.68 g/kg).

**Keywords:** Hormonal Stimulation, HCG, accumulation Period, egg production, grass Carp