

SOME EFFECTS OF PITUITORY EXTRACT ON SEMI-INTENSIVE
SPAWNING OF COMMON CARP (CYPRINUS CARPIO).

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Availability of a dependable source of high quality fish seed, at economical price is an essential prerequisite for the development of fish culture.

Unlike major Chinese and Indian carps, Common carp (Cyprinus carpio) breeds naturally in ponds. However, such 'wild spawning' leads to low yield of fish seed. This experiment was performed to determine the effects of piscine pituitary extract on semi-intensive spawning of Common carp.

Experiment was conducted in four cement tanks of 12.5 m² each. Male common carps were introduced randomly into two cement tanks at 2 per tank, while the other two tanks received 3 each. Female common carps were randomly introduced at 2 per tank. Female common carps in only two of these tanks received intra-muscular injection of common carp pituitary extract. 'Kakabans' were used as egg collecting materials.

Fish in all four tanks spawned. Twenty Four hrs. after spawning random samples of egg collecting materials were taken to find egg deposition rate per unit area (cm²) and fertility rates. After another 48 hrs., same sampling was performed in order to determine the hatchability rate. Randomised Complete Block Design (RCBD) was used for statistical analysis.

Injected fish were observed to spawn earlier and released significantly higher ($p < 0.05$) number of eggs than the uninjected carps. However, fertility rate was found to be significantly higher ($p < 0.05$) with uninjected fish. Percent hatchability between the treatments was not significantly different ($p > 0.05$).

Significantly higher number of eggs released by the hormone treated fish and lower hatchability rate of the fertilized eggs in the uninjected treatment indicate that the administration of piscine pituitary extract would be beneficial to produce a higher number of viable post larvae.

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