

Larval production of Cobia

Brief Description

- ★ Achieved breakthrough in Broodstock Development, Induced breeding and larval production of Cobia, (*Rachycentron canadum*) at Mandapam.
- ★ Collected Fishes weighing 10 kg & above in live condition from commercial catches and transported to hatchery.
- ★ The conditioned fishes are stocked and reared in cages with appropriate broodstock feeds.
- ★ Cannulation of the fishes done at regular intervals & males and females about to reach the spawning stage are isolated and stocked in separate cages.
- ★ When the ova diameter of the female reaches around 700 microns, the fish can be selected for inducing spawning. A ratio of 2 males: 1 female is ideal for spawning.
- ★ Induction of spawning is done by administering HCG at doses of 500 IU per kg body weight for females and 250 IU per kg body weight for male.
- ★ Successful spawning obtained within 48 hours. Eggs spawned 2.1 million, Fertilized eggs 1.9 million.
- ★ Collected the floating eggs by a 500 micron mesh and incubated in the incubation tanks.
- ★ The eggs hatch after 22 hours of incubation at a temperature range of 28 – 30°C. The newly hatched larvae (1.5 million) are stored in the larval storage tanks for marketing.



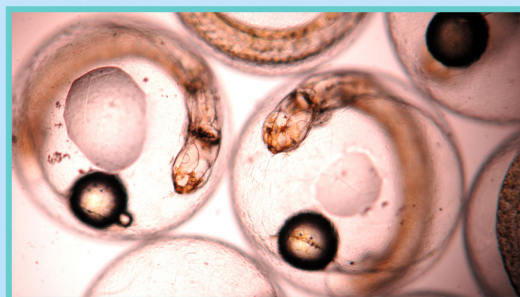
Spawning behaviour inside the spawning tank



Administration of hormones for Final oocyte maturation and spawning



Fertilized eggs collected on 500 micron mesh



Developing embryo of Cobia



Technology Benefits

- ★ High survivability of larvae.
- ★ High fecundity.
- ★ The larvae can be reared to fingerlings at the idling shrimp hatcheries, which can be modified for the purpose.
- ★ A fingerling of 6cm size can be sold @ Rs.10/-

Financial Aspects

- ★ Total investment = 63.50 lakhs *
- ★ Rate of Return = 74.19%
- ★ Profitability = 89.76%
- ★ Market Potential = 10 crores/ year



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