# PRO 2084

# Artificial Incubation of Electric Blue Ram eggs





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## CONTENT

1. Introduction	3
2. Breeding electric blue rams	4
3. Environmental conditions for breeding	4
4. Ram feeding	4
5. Procedure for artificial incubation	5
6. Observations	7

#### 1. Introduction

Artificial incubation of fish is hatching eggs which are separated from brooders by providing controlled environments. Usually egg laying fish tend to eat their eggs when they have met with terrifying events. Therefore most of the situations eggs of egg layers like Angels incubate artificially. But this may be disadvantageous in certain situations.

Developing embryos and larvae have very delicate nature therefore a great care must be taken to provide them with proper incubating and hatching environment.

Electric blue rams stick their eggs on a flat substrate in the aquarium. Therefore it is easy to remove the egg slate and subject to artificial incubation.

#### 2. Breeding Electric Blue Rams

Blue rams are quite expensive fish. Therefore breeding Blue Rams can earn a good profit.

After introducing a compatible pair they might spawn within a week period.

Breeding requiments:

- Glass tank
- 40 L water
- A flat substrate
- Environmental conditions
- Nutrious food varities

#### 3. Environmental conditions

Ammonia = 0 ppm

Nitrite = 0 ppm

Chlorine = 0 ppm

Temperature = > 25 °C

Salinity = 0 (But they can thrive and breed in 1-2 ppm salinities)

### 4. Ram feeding

Mosquito larvae

**Blood worms** 

**Tubifex worms** 

Beef heart

Artemia

Electric blue rams stick their eggs on a flat substrate in the aquarium. Therefore it is easy to remove the egg slate and subject to artificial incubation.

#### 5. Procedure for artificial incubation

- Condition a clean glass aquarium with 40L of water for 24 hrs. This is used for artificial incubation unit.
- Aerate this tank thoroughly ( at least 2 air lines).
- Add 2L of water to a clean container and immediatly transfer the egg slate in brooders tank to that.
- Then add about 1L of water in the conditioned tank slowly in to the container with egg slate.
- Keep the egg slate on the container for about 5 minute.
- Then introduced the egg slate to the conditioned tank.
- Set air stones closer to the eggs on the slate.
- Add about 0.5 mL methylene blue to the tank to prevent fungal infections.



Figure 1: eggs on the slate



Figure 2: Eggs in the artificial incubation tank

# 6. Observations

	Artificial	Natural incubation	Natural
	incubation	in Tank87	incubation in
			Tank 88
No of eggs on the	$368 \pm 5$	About 300	About 300
slate			
Slate introducing	2016/2/25	Eggs laid on	Eggs laid on
date for AI		2016/2/25	2016/2/25
Eggs hatching date	2016/2/27	2016/2/27	2016/2/27
Fry free swimming	2016/2/ 29	2016/2/ 29	2016/2/ 29
date			
No of fries	about 100	About 200	About 100

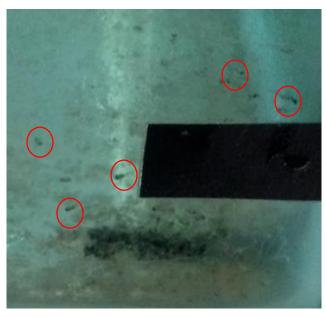


Figure 3: One week old fry