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ABSTRACTS OF PAPERS

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Induced breeding of Rainbow shark minnow *Epalzeorhynchus frenatus* (family: Cyprinidae) using Ovaprim

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Rainbow shark minnow (*Epalzeorhynchus frenatus*, Fowler) is a commercially important exotic small cyprinid in the worldwide aquarium trade. It is native to Thailand, Southeast Asia and is also found in Indonesia. Local ornamental fish industry depends on fry imported from Thailand and Singapore to cater to the present demand of the country and no export opportunity is created under this situation. Hence, the present study attempts to investigate the possibility of developing an induced breeding technique to support the growing ornamental fish industry. The sub adults (body weight 8.54 ± 1.3 g and total length 7.05 ± 0.5) were acquired from the local aquarium in November 2012. They were reared in cement ponds and provided with 3% of Body Weight (BW) of commercially available sinking diet twice daily. All fishes were closely monitored weekly for maturity over a 12 week period. Thereafter, the gravid females were subjected to intra ovarian biopsy once a week. The females with modal diameters of oocytes >1 mm (1007 ± 50 μ m, average) and moving germinal vesicle towards the peripheral were subjected to induce breeding trials. The doses of Ovaprim (Ovaprim 1 ml consists of 20 μ g of GnRH and 10 mg of Domperidon) 0.25 ml/kg of BW, 0.5 ml/kg of BW and 0.75 ml/kg of BW were used as a single dose for each female in replicate. At the same time selected males were treated with half of the dose used for the females at 1500 hrs. Nine 60 cm x 30 cm x 30 cm glass tanks in indoor system of 20 cm water depth with small stones laid at the bottom were used as the spawning tanks. Spawning was observed in only the tanks that were treated with the concentration of 0.25 ml/kg of BW and 0.5 ml/kg of BW after 8 hrs. During the latency period temperature ranged from 27.4 °C – 27.8 °C and pH was measured as 7.3. Their hatching period was 6-10 hrs and fertility was observed as 80%. The present study revealed the single Ovaprim dose of 0.25 ml/kg of BW of female and its half dose for male can be successfully used for breeding of *Epalzeorhynchus frenatus* and to produce viable eggs with high fertility.

Keywords: *Epalzeorhynchus frenatus*, exotic ornamental fish, induced breeding, ovaprim

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