

Recent study on spawning success of *Pangasius sutchi* (Thailand Catfish) in Sri Lanka using Ovaprim™

E.D.M. Epasinghe^{1*}, H.M.P. Kithsiri¹ and S.T. Wawwage²

¹ Inland Aquatic Resources and Aquaculture Division, National Aquatic Resources Research and Development Agency (NARA), Crow Island, Colombo 15, Sri Lanka.

² Matara fish farm, Linyge watta, Kumbalgama, Devinuwara, Matara, Sri Lanka.

Pangasius sutchi, commonly known as striped catfish, is very popular as an exotic ornamental fish in Sri Lanka. Breeding of this fish is rather difficult; therefore, the industry generally depends on the imported juvenile stages. Hence, the present study was carried out to determine the techniques of induced spawning of the fish. Brood fish were raised with the stocking density of 2.5 kg/m³ in cement ponds for a period of 3 ½ years and supplied commercially available diet. Female fish with distended abdomen and pinkish vents were subjected to intra ovarian biopsy. The modal diameters of the oocytes were greater than 1.0 mm (1.12 ± 0.05 mm, on average) and germinal vesicle were moved to the peripheral. Males were tested for milt by applying gentle stripping to the abdomen. Two successive Ovaprim [1ml of Ovaprim® (Syndel Laboratories, Canada) contains 20µg of GnRH a and 10 mg Domperidon] intramuscular injections of 0.3 and 0.7 ml of female body weight (BW) were given at 12 h intervals and the male was injected 0.4 ml at the same time as the first injection of females. The modal oocyte diameter after 12 h from the first injection (just before second dose of Ovaprim) was 1.31 ± 0.05 mm. They were observed to be more rounded with advancement of germinal vesicle migration. The germinal vesicle break down (GVBD) appeared after 10 h from the second injection. In order to detect the movement of ovulation, gentle stripping trials were performed every 30 minutes and full ovulation occurred after 12 h latency. Mean water temperature ranged between 27.1 and 28.3°C during the period of latency. The fertilized eggs hatched within 30-40 h and hatchability was 68%. The injection of 0.5 ml kg⁻¹ of female BW in two doses as 1/3 and 2/3 between 12 h and 10-12 h latency was successful to get viable eggs, ease stripping response and good hatchability.

Keywords: spawning success, *Pangasius sutchi*, Ovaprim

*Corresponding author e-mail: edmepasinghe@gmail.com