

## Embryonic and larval development of river catfish *Hemibagrus nemurus* (Valenciennes, 1840).

### ABSTRACT

The aim of this study was to characterize embryonic and larval developmental stages of the river catfish, *Hemibagrus nemurus*. Fertilized eggs were spherical, adhesive and demersal with a mean egg diameter of  $1.5\pm 0.3$  mm. Seven embryonic periods were characterized for timing and features: zygote, cleavage, blastula, gastrula, segmentation, pharyngula and hatching. Mean hatch was  $23\pm 1$  h post fertilization at  $27^{\circ}\text{C}$ . The newly hatched larvae measured  $3.0\pm 0.2$  mm in total length. Morphogenesis was completed in a day. The yolk sac was completely absorbed in three days. *H. nemurus* has a short embryonic developmental period in comparison with other catfish species. The information obtained from this study will be useful for egg incubation and larval rearing during the culture of *H. nemurus*.

**Keyword:** Catfish; Early development; Embryology; *Hemibagrus nemurus*; Larval development.