

Breeding Biology and Induced Breeding Status of Freshwater Mud Eel, Monopterus cuchia

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Abstract : In this study, breeding biology and induced breeding of freshwater mud eel, *Monopterus cuchia* was observed during the experimental period from February to June, 2013. Breeding biology of freshwater mud eel, *Monopterus cuchia* was considered in terms of gonadosomatic index, length-weight relationship of gonad, ova diameter and fecundity. The ova diameter was recorded from 0.3 mm to 4.30 mm and the individual fecundity was recorded from 155 to 1495 while relative fecundity was found from 2.64 to 12.45. The fecundity related to body weight and length of fish was also discussed. A peak of GSI was observed 2.14 ± 0.2 in male and 5.1 ± 1.09 in female. Induced breeding of freshwater mud eel, *Monopterus cuchia* was also practiced with different doses of different inducing agents like pituitary gland (PG), human chorionic gonadotropin (HCG), Gonadotropin releasing hormone (GnRH) and Ovuline-a synthetic hormone in different environmental conditions. However, it was observed that the artificial breeding of freshwater mud eel, *Monopterus cuchia* was not yet succeeded through inducing agents in captive conditions, rather the inducing agent showed negative impacts on fecundity and ovarian tissues. It was seen that mature eggs in the oviduct were reduced, absorbed and some eggs were found in spoiled condition.

Keywords : breeding biology, induced breeding, *Monopterus cuchia*, human chorionic gonadotropin

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