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Successful induced breeding and hatchery development of *Pangasianodon hypophthalmus* (Sauvage, 1878) under controlled conditions of Raipur, India

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Pangasianodon hypophthalmus, commonly known as striped (sutchi, iridescent shark) catfish, fetches high price is markets. Culture of this species is growing day-by-day in Bangladesh, Indonesia, India and Vietnam, the latter being top producer and exporter of the species in more than 100 countries, mainly in European Union, Russia, South-east Asia and USA in the form of white fillets. It has been introduced in Singapore, Philippines, Taiwan, Malaysia, China, Myanmar, Bangladesh, Nepal and India. In India, it was brought in West Bengal through Bangladesh during 1997. Initially, its culture was carried out in Andhra Pradesh and West Bengal in private sector but the Government of India permitted aquaculture of *P. hypophthalmus* in year 2010-11. *P. hypophthalmus*, the fast-growing exotic catfish, has vast potential for freshwater aquaculture in India. Females attain maturity at the end of third year while male mature in two years. It is a highly fecund fish, seasonal spawner and breeds once in a year in flooded river. The females were found to be larger than males. Recently, the striped catfish has been bred successfully in Mekong Delta region of Vietnam by using high doses of human chorionic gonadotropin (HCG). In the present experiment, 10 females and 5 males were induced bred by dry stripping method under agro-climatic conditions of Raipur (Chhatisgarh). For induced breeding, ovaprim was administered @ 0.5 ml/kg to female and 0.3 ml/kg male brooders and spawning occurred after 10-12 hour of the injection with 60-80% fertilization success. Since the eggs were sticky is nature, cow milk, multani mitti (soil) and black soil were used for removal of stickiness. Hatching of the fertilized eggs took place in vertical jar hatchery in 26 hours at 28±10C. Out of 40 lakh fertilized eggs, 28,80,000 hatchlings, 15,14,000 early spawn and 10,50,000 fry were obtained. After rearing of 30-40 days in nursery ponds, 6,30,000 fingerlings of *P. hypothalamus* were obtained and stocked @ 25,000-30,000/ha for aquaculture.

Keywords: *Pangasianodon hypophthalmus*, induced breeding, seed production, Raipur, India.

Biography

A K Pandey completed his PhD (Zoology, Comparative Endocrinology) from the University of Gorakhpur in 1990. Presently, he is Principal Scientist at National Bureau of Fish Genetic Resources (ICAR), Lucknow. He has published 234 research papers in journals of repute. Most of his papers are widely cited by eminent scientists of the world. He is editorial board member of a number of national journals.

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