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Induced Spawning of Batfish (*Oreoglanis siamensis*)

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Abstract

The batfish belongs to the family *Sisoridae* (Sisorid catfishes) and is native to the Mekong and Chao Phraya basins. The species inhabits high mountain streams and feeds on insects and worms. In northern Thailand, the fish was found abundantly in the streams of the mountain area of Doi Inthanon and Doi Chiang Dow, where they hide under the rocks, but nowadays the numbers are decreasing substantially. A restocking programme is planned, however, till now no information is available about artificial reproduction of this species. Therefore 92 fish with an average size of 8.4 cm and an average weight of 5.5 g were collected from streams of the Chiang Dow district in Chiang Mai province. These streams are characterised by a mean water temperature of 18°C, dissolved oxygen of 7 to 11 mg l⁻¹, pH 6.4 to 8.9, water hardness of 19 mg l⁻¹ as CaCO₃, and 2.24 mg l⁻¹ free CO₂. The fish were transported to the Chiang Mai Inland Fisheries Research and Development Center, Department of Fisheries, Chiang Mai, where the fish were kept in aquaria. Male and females could be distinguished clearly only in the spawning season which occurred from February to October. The sex ratio of fish was 1:1.18 male to female. In March, fish were injected with burselin acetate (30 µg kg⁻¹ body weight) and domperidone (10 mg kg⁻¹ body weight) to induce spawning. Brood fish started spawning 24 hours after injection. Stripped eggs were yellow, of round shape and 0.35 cm in nucleus diameter. The incubation period of fertilised eggs was around 240 hours at 18–20°C water temperature with a mean hatching rate of 15%. Newly hatched fry had a total length of 1.05–1.20 cm and a yolk sac diameter of 0.35 cm. The post larval period was 28 days with fry size of 2.1 cm length and 0.065 g weight.

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