

Captive breeding of *Esomus thermoicos* (Flying barb), an endemic freshwater fish species in Sri Lanka

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Esomus thermoicos is a freshwater fish endemic to Sri Lanka. Combination of several factors caused this species to fall to threatened levels, highlighting immediate need of conservation. The objective of this study was to enhance the survival of this species and generate baseline data for rearing and breeding programmes through identifying a most suitable method for captive breeding, investigating an acceptable feeding regime for the larval stage of the fish and determining the breeding interval of *Esomus thermoicos*. Wild caught juveniles of this species were reared in cement tanks until they attained sexual maturity. Afterwards, 18 breeding pairs were divided in 9 glass aquaria and were provided with common aquarium plants and tree logs. For breeding substrate experiments, tanks were divided in to three treatments (sand, coarse sand and free bottom). *Esomus thermoicos* did not show particular preference for bottom substrates. Instead, sand as substrate in tanks would act as obstacles for breeding. Breeding intervals were examined after 7 and 14 days of first breeding by using first bred six breeding pairs and found as 14 days. Twelve days old fries were collected and divided into three groups each group consisting of 30 fries and fed with micro worms, powder feed and *Artemia nauplii* as feed regimes. After 15 days standard body length, weight and survival rate were measured in each treatment. The *Artemia nauplii* fed batch had shown the highest growth rate probably due to high nutritional value of *Artemia*. Similar weight gain and length gain were achieved in micro worms and powder fed larvae. High survival rate was achieved by the micro worms fed batch. In conclusion, *Esomus thermoicos* can be bred successfully under captive conditions, preferring non-sandy bottoms. Larval rearing can also be done by using available live feeds.

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