



CAPTIVE BREEDING OF DAWKINSIA SRILANKENSIS (DANKUDU PETHIYA)

A.H.M.S.S.K.Abeysinghe¹, K.D.S.Y Kularathne², D.D.B.Silva², 2C.Siriwardhana²,

H.B.U.G.M.Wimalasiri²

¹National Zoological Garden, Dehiwala, Sri Lanka

²Department of Zoology, University of Sri Jayewardenepura

The *Dawkinsia srilankensis*, commonly known as blotched filamented barb or “Dankudupethiya”, which belongs to family Cyprinidae, is categorized as a critically endangered endemic species. Due to high rates of exploitation, habitat destruction and pollution in their natural habitats, captive breeding and rearing seems to be a more effective solution. The study was carried out at aquarium, National Zoological Garden, Dehiwala from March 2013 to October in 2013. Sexually matured fish (4.0 cm) were captured from wild in Knuckles region. During the first month, fish were kept in an earthen pond. When they formed pairs, two pair of fish were moved into an especially constructed rocky habitat to help the fish to acclimatize to the artificial environment. The temperature was maintained at 25 °C with natural sunlight, salinity 30 ppt, pH 8.2 and NO₂ and NH₃ < 0.03 ppm. The pond was especially modified into three compartments enabling the water circulation at a flow rate of 1.0 cm/s. The fish were fed twice a day with egg yolk and fish feed. Their reproductive behavior was observed closely. The two pairs of fish showed chasing behavior prior to the spawning. After 9 weeks hatchlings were detected in the pond system. They were fed with *Artemia* and egg yolk. Nearly 100 of hatchlings were counted and after 01 week there were 75 fingerlings of 1.0 cm in length with a survival rate of 75%. After 2 weeks the mean length of fingerlings reached 2.0 cm. This is the first study carried out of captive breeding of *Dawkinsia srilankensis*. Therefore this implies the possibility of captive breeding of endemic fish that has faced the threat of extinction. Thus being a positive step towards their conservation.