GENETIC CHARACTERIZATION OF THE TWO COLOUR-TYPE OF KELAH

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ABSTRACT
Randomly Amplified Polymorphic DNA (RAPD) marker was used to examine the genetic relationships among three populations of two different colour-types (silver-bronze and reddish) of ikan kelah (Tor tambroides). Sixty three individuals of the kelah were sampled from Sia River of Pahang and Kampung Esok River of Negeri Sembilan (silver-bronze) and Nenggiri River of Kelantan (reddish). Twelve RAPD primers generated a total of 226 scorable loci with 100% polymorphism across the sixty-three individuals. The RAPD banding patterns and sizes ranged from 4 to 17 and from 100bp to 1500bp, respectively. The intra-population UPGMA dendrogram produced two major clusters, with the Nenggiri River (Kelantan) samples formed a subcluster in both major clusters dominated by the Pahang samples (Cluster 1) and N. Sembilan (Cluster 2) samples, respectively. The inter-population UPGMA showed that the Kelantan samples were genetically closer to the N. Sembilan samples than to the Pahang samples. Thus, the results of this study did not support the hypothesis that the two colour-types of T. tambroides were genetically distinct from each other.

Key words: Freshwater fish, Tor tambroides, colour-type, RAPD, genetic marker

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