



Conference Abstract

Mitochondrial dna diversity of crossbanded barb *Puntioplites bulu* (Bleeker, 1851) from natural populations in peninsular Malaysia

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Received: 04 Mar 2021 | Published: 04 Mar 2021

Citation: A Ghani IF, Abu Bakar A, Aziz A, Annie C, Sharr HA, Mohd IFS (2021) Mitochondrial dna diversity of crossbanded barb *Puntioplites bulu* (Bleeker, 1851) from natural populations in peninsular Malaysia. ARPHA Conference Abstracts 4: e65508. <https://doi.org/10.3897/aca.4.e65508>

Abstract

Puntioplites bulu is a freshwater Cyprinidae and widely distributed in Southeast Asia. It has attracted considerable interest due to high demand and price. However, an apparent decline in its distribution and abundance is observed and this is due to several factors, such as habitat degradation, pollution, and overfishing. Intraspecific variation of *P. bulu* from three major rivers in Peninsular Malaysia were determined based on genetic divergence by using mtDNA Cyt b. Two distinct genetic lineages were apparent viz Central West and East Peninsular Malaysia with natural barriers (the Titiwangsa Range) acted as natural dividers between these two lineages. Alternatively, the close genetic relation and haplotype sharing that were observed between Perak and Kelantan populations could be due to human translocations. Further, haplotype sharing between Kelantan and Pahang populations revealed the migration ability of *P. bulu* through ancient connectivity. These findings provide an important base study for initiating a selective breeding program

Keywords

Genetic diversity, Population structure, *Puntioplites bulu*, Mitochondrial DNA, Cytochrome B

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Presented at

1st DNAQUA International Conference (March 9-11, 2021)