T4-01

Towards Phylogenetics Analysis of Peninsular Malaysian Pangasiids: A Comparison of Phylogenetic Trees of Pangasiid Catfishes (Teleostei:Pangasiidae) Estimated from Mitochondrial DNA Sequences

Haslawati, B., Khairul-Nizam, A. & M.R. Idid,

Institute of Biological Sciences, Faculty of Science University of Malaya, 50603 Kuala Lumpur, Malaysia

Despite the commercial importance in fisheries in South East Asian countries, there is lack of comprehensive documentation on the Pangasiid catfish's systematics and biology. The taxonomy of these species is still problematic due to morphological similarity and difficulty to differentiate between some species complexes. Major taxonomic revision of Pangasiidae in 1991 by Roberts & Vidthayanon, strongly recommend four genera (*Pangasius* Vallenciennes, 1840; *Helicophagus* Bleeker 1858; *Pangasianodon* Chevey, 1930 and *Pteropangasius* Fowler, 1937). However, the latter two genera were considered as subgenus of *Pangasius* since there are some shared characteristics with the other species in the genus *Pangasius*, thus no sufficient evidence to distinguish them as a valid genus using the conventional identification method. Molecular studies that are currently tried to resolve these ambiguities by using different genes, however, come with differen To resolve this problem, current researchers attempt to use molecular tools. t conclusion. These independent works with different gene created phylogenetic inconsistencies. This paper synthesizes and highlights current phylogenetic works done on pangasiidae family by comparing three different trees inferred from three mitochondrial DNA genes namely cytochrome b (539 basepairs), 12S rDNA (737 basepairs) and 16S rRNA (570 basepairs). Consensus of the trees and interfamily relationships are discussed. Evidence in confirming the previously suggested subgenera are shown. This preliminary work is necessary in order to gather baseline information for determining the Peninsular Malaysian pangasiid status and fill the distribution gap of pangasiid evolutionary history by connecting the lost biogeographic relationship between the species occurred in continental Asia and Indo-Malaya Archipelago.