

Proceeding Paper

Conservation Status of Globally Testudines River Terrapins Based on DNA Barcoding[†]

Mohd Hairul Mohd Salleh^{1,2} and Yuzine Esa^{1,3,*}

¹ Department of Aquaculture, Faculty of Agriculture, Universiti Putra Malaysia, Serdang 43400, Selangor, Malaysia; gs56212@student.upm.edu.my

² Royal Malaysian Customs Department, Persiaran Perdana, Presint 2, Putrajaya 62596, Malaysia; hairulhellas@gmail.com

³ International Institute of Aquaculture and Aquatic Sciences, Universiti Putra Malaysia, Lot 960 Jalan Kemang 6, 71050 Port Dickson, Negeri Sembilan, Malaysia; yuzine@upm.edu.my

* Correspondence: yuzine@upm.edu.my; Tel.: +60-3-9769-4933

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Abstract: River terrapins are turtle types that live in freshwater or brackish water. There are 12 species of river terrapin worldwide. A total of 26 COI sequences of worldwide river terrapins were used in this study. The study aims to determine the global utility of river terrapin DNA barcoding using novel COI sequences and compare them to other COI sequences previously published in BOLD systems and GenBank. Nevertheless, the conservation status of the river terrapins is also taken into account for sustainability priority. The sequences contained three families, as determined by the UPGMA tree, with 33% of river terrapins classified as least concern (LC) and 25% classified as critically endangered (CR). The genomic and bioinformatics analyses of river terrapins reported here may serve as a foundation for future research on this species throughout the world.

Keywords: Turtle; COI sequences; BOLD Systems; GenBank; sustainability; UPGMA tree and critically endangered

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