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PHYLOGENETIC ANALYSIS OF THAI OYSTER (OSTREIDAE) BASED ON PARTIAL SEQUENCES OF THE MITOCHONDRIAL 16S rDNA GENE

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ABSTRACT: Ten oyster species of the family Ostreidae (Subfamilies Crassostreinae and Lophinae) from Thailand were studied using morphological data and mitochondrial 16S rDNA gene sequences. Additional sequence data from five specimens of Ostreidae and one specimen of *Tridacna gigas* were downloaded from GenBank (*T. gigas* was used as outgroup). Some specimens were found to be genetically identical despite obvious morphological differences (*e.g.* four specimens of *Crassostrea iredalei* from east and west sides of the Malaysian peninsula and *Saccostrea forskali* and *S.* cf. *malabonensis,* both from Thai waters). The results indicate that *Striostrea mytiloides* belongs to the genus *Saccostrea*. The results also suggest that none of the three subfamilies in Ostreidae is monophyletic.