Morphometric variations among three different populations of Cobia, Rachycentron canadum (Linnaeus 1766) in Peninsular Malaysia

ABSTRACT

Cobia Rachycentron canadum, is one of the emerging aquaculture species but is usually a non-target resource in fisheries industry and within Malaysia, their landings are among the highest worldwide. Identification of stocks with unique morphological characters is important for effective management and sustainable utilization. Morphometric variations among three different cobia populations from Kedah, Terengganu and Johor were studied. All the morphometric characteristics varied among the three populations as all the elements of the first Eigen vector were positive. Discriminant analysis suggested that head depth (HD) and maximum body depth, (MaxD) were the most varied among the populations. Cobia populations from Kedah and Johor were in a single cluster in the dendrogram with a 63.69% similarity while Terengganu was in another cluster with a similarity of 8.01% from Kedah and Johor. The differences in the observed morphometry may be resulted from different trophic activities and/or habitat productiveness explored by each of the populations.

Keyword: Cobia; Malaysia; Morphometric variation; Population size; Rachycentron canadum