TWO NEW SPECIES OF SEPIA (DORATOSEPION) (CEPHALOPODA: SEPIIDAE) FROM TAIWAN, BASED ON MORPHOLOGICAL AND MOLECULAR DATA

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ABSTRACT: Two new species of Sepia belonging to the Doratosepión group, called Sepia furcata and Sepia hirunda, are described from the waters off Taiwan, based on morphological and molecular evidence. The posterior ends of the fins of both forms extend posteriorly to form long “tails”, but there are differences in “tail” length, and the length of the arm 2 between the two species. The two species have different distributions in Taiwan: S. furcata, sp. nov. occurs in the northeast and S. hirunda, sp. nov. occurs in west and southwest of Taiwan. Analyses of genetic distance using mitochondrial DNA cytochrome c oxidase subunit 1 sequences reveal that the genetic divergence of these two species is much greater than the variation within these two species. Based on morphological and molecular data, these two taxa are considered as two valid species.