

**MORPHOLOGICAL AND MOLECULAR EXAMINATIONS OF A NORTHWESTERN
INDIAN OCEAN POPULATION OF THE AFRICAN ANGELSHARK,
Squatina cf. africana Regan, 1908 (CHONDRICHTHYES: SQUATINIFORMES:
SQUATINIDAE), WITH REMARKS ON INTRASPECIFIC VARIATIONS**

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ABSTRACT: Morphological and molecular examinations of angelshark samples from the northwestern Indian Ocean, collected by a Thai fishing vessel in February 2017, offered an opportunity to explore the diversity of angelsharks in this region. All specimens were similar to *Squatina africana* Regan, 1908 on several characteristics, such as the presence of simple nasal barbels with narrow, tapering tip, smooth to weakly fringed bases, enlarged denticles on snout, and the absence of paired ocelli on back, distinguishing them from *S. tergocellata* McCulloch, 1914, *S. pseudocellata* Last and White, 2008, and *S. legnota* Last and White, 2008, in the adjacent Indo-West Pacific region. However, morphological characteristics of these samples also showed intraspecific variation, particularly concerning size and coloration as well as many measurements, that were different from *S. africana*. The application of DNA barcoding using fragments of COI gene could not confidently support species identification. Although COI sequences of our samples indicated a monophyletic grouping with the known *S. africana* that was separated from other congeneric species with high statistical support, the genetic distance within this clade was greater than intraspecific genetic variation commonly reported in most elasmobranchs. Therefore, it was appropriate to identify as *S. cf. africana* until further confirmation with additional samples. Nevertheless, the new data on intraspecific variation found in our samples and comparison with *S. africana* fill in the knowledge gap of shark diversity and contribute to a much-needed conservation plan for angelsharks in western Indian Ocean.

Keywords: African angelshark, *Squatina cf. africana*, Indian Ocean, species identification, morphological variation, DNA barcoding
