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IDENTIFICATION AND PREVALENCE OF *Dinurus euthynni* INFECTING *Auxis thazard* (FRIGATE TUNA) FROM SOUTHERN AND NORTHEASTERN MARINE WATERS OF SRI LANKA

T.R.I. Gamage^{1*}, R.P.V.J. Rajapakse², K.D.V.N. Wijenayake¹ and N.M.T. Anupama²

¹Department of Fisheries and Marine Science, The Ocean University of Sri Lanka, Nugegoda, Sri Lanka.

²Department of Veterinary Pathobiology, University of Peradeniya, Peradeniya, Sri Lanka.
*ruvishan1001@gmail.com.

Auxis thazard (Frigate tuna) is an economically important tuna species found in Sri Lankan coastal waters. Endoparasite infections can cause inflammation, congestion, and hemorrhage in vital organs such as the stomach, liver, and intestines of fish. The digenean fauna of this species is still inadequately documented. The aim of this study was to identify the digenean parasitic trematode, *Dinurus euthynni*, parasitising Frigate tuna and compare its prevalence in northeast coast (Trincomalee) and southern coast (Galle) of Sri Lanka. A total of 50 specimens, 25 each from Galle and Trincomalee, were dissected. Parasites were extracted from their stomach, cleaned with 0.9% saline water, and preserved in 70% aqueous ethanol solution. Morphological identification was based on characteristics including a dorsoventrally flattened, narrow, elongate body with rounded anterior and posterior ends, a short fore body and well-developed ecsoma longer than the body, and with irregular tegument covered with prominent plications. The oral and ventral suckers were well-developed, muscular and transversely oval. Phylogenetic analysis was conducted using the second internal transcribed spacer (ITS2) and cytochrome c oxidase subunit 1 (COX1) gene regions. The identified local sequence was 100% similar to the sequence identified from Rio de Janeiro, Brazil, bearing accession no. OP458340.1. The parasites measured between 4479 – 14562 μm and the length of ecsoma ranged between 2107 – 8141 μm . A total of 79 specimens of *D. euthynni* were recorded across both sites. The prevalence was higher in Galle (52%) compared to Trincomalee (28%). The mean abundance was 2.5 ± 0.7 in Galle and 0.6 ± 0.2 in Trincomalee. According to the Mann-Whitney U test, there was a significant difference in parasite abundance between sites ($p = 0.032$). This study reports the identification of *D. euthynni* and marks the first attempt to study its infection in Sri Lankan marine food fish.

Keywords: *Dinurus euthynni*, Endoparasite, Frigate tuna, Trematodes