CONFIRMATORY IDENTIFICATION OF SCAD FISH (*Decapterus spp.*) USING MOLECULAR AND MORPHOLOGICAL DATA

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ABSTRACT

The *Decapterus spp.* is one of economically important fish species in Sri Lanka, there are three kind of *Decapterus* fish species in Sri Lankan sea water; namely *Decapterus macarellus* (Mackerel scad), *Decapterus macrosoma* (Longbodied scad) and *Decapterus ruselli* (Russel's mackerel scad) .

At present Sri Lanka fisheries sector have gained importance due to starting of cane fish industry. One of the *Decapterus spp.* are purchased by canning fish industry from local fisher men for canning purposes which are commonly known as "Linna".

In this study we reviewed the morphological identification of *Decapterus spp.* in Sri Lankan sea water and the morphological identification was confirmed by the way of molecular identification tool, mitochondrial cox1 gene (approximately 655 bp). Only two kinds of *Decapterus spp.* were identified by the way of morphological and molecular identification tools in Sri Lankan sea water; namely *Decapterus macarellus* (Mackerel scad) and *Decapterus ruselli* (Russel's mackerel scad) during the study period, and any single specimen of *Decapterus macrosoma* did not identified by the way of molecular and morphometric identification tools.

Key words: *Decapterus spp.*, molecular identification, morphological identification, mitochondrial cox1 gene (approximately 655 bp).