

**STUDYING THE FISHERY AND BIOLOGY OF  
SCADS, (*DECAPTERUS SPP.*) IN THE EEZ OF  
SRI LANKA**

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## ABSTRACT

The Scads or *Decapterus spp.* are commonly known as “Linna” in Sri Lanka. This study aimed to fill information gaps in *Decapterus* fishery, reproductive biology and feeding ecology in Sri Lanka. Preliminary survey was conducted from Matara to Hambanthota all fish landing sites. Field sampling and laboratory analysis examined the biological characteristics of *Decapterus spp.* caught by two different landing sites including size, growth rate, age, and sex ratio, maturity, spawning condition, and feeding ecology. A total of 70 specimens were examined during the study period. 98% of the samples were *D. macarellus*. Therefore, major predominant *Decapterus* species was *Decapterus macarellus* and other than that *Decapterus russelli*, was recorded in small quantities. In southern coastal areas and Beruwala this fishery is dominant over other areas. Both day boat and multiday boats contribute to *Decapterus* fishery. But day boats contribution is negligible when compare with multiday boats contribution. Major fishing gear is ringnet in multiday boats while gillnet is in day boats. . Even though there is no season for this fishery July to December is the peak season of this fishery. Mean total length of male *D. macarellus* was  $27.91 \pm 2.71$  cm and female was  $28.73 \pm 1.58$  cm. Length weight relationship of female was  $W = 0.0098TL^3$  and male  $W = 0.0262TL^{2.71}$ . From the sex ratios it can be seen that in *D. macarellus* males dominated over females. More than 50% of *D. macarellus* females were matured in the length group 29-30 cm and males were matured in the length group 28-29 cm TL. Out of 45 males 15% were immature and other 85% were matured and also out of 25 females 4% were immature and 96% were mature. . The fecundity of *D. macarellus* was found which vary from 85955 to 168148 ova. The average fecundity was  $118933 \pm 28046$  ova. . In the present study also the fecundity of *D. macarellus* increase with increase in length of the fish. The dominant food item was zooplanktons and few phytoplankton were identified .Shrimp larvals were abundant food item many of gut content other than Copepods, Rotifers and diatoms were identified.

Key words: *Decapterus spp.*, Fishery, Reproductive biology, Feeding ecology