

Feeding Habit of Two Carangidae Species *Decapterus russelli* and *Megalaspis cordyla* from Pakistani Water

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Study was conducted to review the feeding habit of two fish species of family carangidae to know the status in food web in an ecosystem. Carangids are known as pelagic predator mostly feed on crustacean and teleost. A total of 1445 samples including 974 sample of *Decapterus russelli* and 471 sample of *Megalaspis cordyla* were collected from June 2020 to May 2021. Percentage of frequency occurrence (FO%) method used to analyze the data. Most dominant fooditem was crustacean (66.45 %) in *D.russelli* and fish (51.7 %) in *M. cordyla*.

[**Keywords:** Feeding habit, Carangidae, *Decapterus russelli*, *Megalaspis cordyla*, frequency of occurrence method, pelagic predator]

INTRODUCTION

Fossils record of Carangids is found from the time of Eocene (Berg 1947). 148 species of 31 genera of this family found worldwide (Froese and Pauly 2024) known by various common name Jacks, Pompanos, Scads and Travelies etc. Largest fish species is Greater amberjack (*Seriola dumerli*) which attain a size of 1.8 m with 70 kg weight, species Lookdown (*Selene vomer*) has the most un-useful body shape with lofty forehead, ciguatera poisoning found in some larger species such like Amberjack and Jacks (Britannica 2024). Member of the family Carangidae are common in Pacific, Atlantic and India Ocean in temperate, tropic and in sub tropic waters. (Bannikov 1987), generally found in school. Mostly compressed body and silvery color but few are fusiform. Large body scute on lateral line and 2 separate anal spines are the main identification character of these species (Fischer and Bianchi, 1984) Few species has finlets similar to Tuna.

Study of food pattern is useful to know the trophic relationship in an environment. Amount and quality of food taken by fish is helpful to estimate the fish production (Paloheimo and Dickie, 1970; Mills and Fournier, 1979). Feeding ecology of commercial and non commercial fishes is necessary for implementing a multispecies approach for fishing management (Gulland 1977; Larkin (1978). Randall (1967) separated Carangid on the bases of diet composition piscivore and planktivores. Gosline and Brock

(1960) described genera of Atule, *Decapterus* and *Selar* as planktivores. Generally Carangoids known as fish eater (Low-McConnell 1987)

Carangids travel in search of food and in better breeding ground (Sivikami 1996). Food and feeding habit of carangids is very important which provide the information about distribution and preferred food items. Kuthalingam (1955) recommended for more work require on feeding habit of family member of this species. Study of feeding habit of Carangid species has been conducted in past by many leading scientist (Chidambaram and Venkataraman 1946; Devanesan and Chidambaram 1948; Chacko 1949 ; Chacko and Mathew 1954 ; Datar 1954 ; Kuthalingam 1955, 59 ; Tandon 1959, 60 ; James 1967 ; Reuben 1968 ; Belinger and Avault 1971; Kagwade 1971; Munasinghe 1972; Sreenivasan 1974, 79; Venkataramani and Natarajan 1983, 88; Sivakami 1990 and Shameem 1992). These studies shows the different food item in day and night found in different months.

Annual worldwide production of Carangidae was analyzed at 5.13 million tons in 2018, out of this 65% come from Asia, it is also generally used as live fish bait. (Jose et al 2022)

Decapterus russelli

D.russelli found throughout the Indian Ocean, from the coasts of eastern Africa from the Suez channel, South Africa to Indonesia, western Pacific Ocean, from Japan to Australia (Fischer and Bianchi 1984).