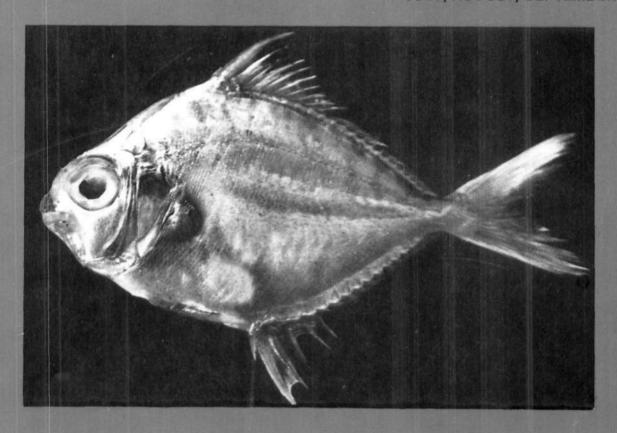


सपुद्री मात्स्यिकी सूचना सेवा MARINE FISHERIES INFORMATION SERVICE

No. 113

JULY, AUGUST, SEPTEMBER 1991



तकनीकी एवं TECHNICAL AND विस्तार अंकावली EXTENSION SERIES

केन्द्रीय समुद्री मात्स्यिकी CENTRAL MARINE FISHERIES अनुसंधान संस्थान RESEARCH INSTITUTE कोचिन, भारत COCHIN, INDIA

> भारतीय कृषि अनुसंधान परिषद INDIAN COUNCIL OF AGRICULTURAL RESEARCH

ON THE EMERGING FISHERY OF MACKEREL SCAD, DECAPTERUS MACARELLUS FROM VIZHINJAM*

The carangids which constitute a major fishery at Thiruvananthapuram coast is represented by a variety of species. The scad (genus Decapterus) is the most abundant group of carangids in the area and is constituted chiefly by two species viz. Decapterus russelli and D. Eventhough the occurrence of macrosoma. mackerel scad, Decapterus macarellus was reported from Vizhinjam area by Sreenivasan (Indian J. Fish., 23, (1 & 2): 41-56, 1976), it was landed only in stray numbers prior to the introduction of motorised traditional crafts. These crafts have helped in the expansion of fishing grounds from nearshore areas to slightly distant grounds. Consequently exploitation of certain resources like tunas, perches and carangids has been improved. The emerging fishery of Decapterus macarellus (Fig. 1) is one among them .

D. macrosoma
Caudal fin hyaline to dusky
Maximum fork length rarely
exceeds 25 cm
Scales on top of head do
extend not extend forward
to beyond posterior margin
of pupil
Posterior end of upper jaw
concave above, rounded
and produced below

D. macarellus
Caudal fin yellow-green
Fishes upto 33 cm fork
length are common
Scales on top of head
forward to anterior margin of pupil

Posterior end of upper jaw straight above, mod erately rounded and slanted anteroventrally



Fig. 1. The mackerel scad, Decapterus macarellus.

Prepared by: G. Gopakumar and K. T. Thomas, Vizhinjam Research Centre of CMFRI, Vizhinjam - 695 521.

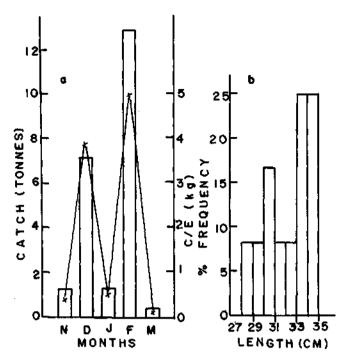


Fig. 2a. Monthwise catch (tonnes) and catch rate (kg) of Decapterus macarellus in drift net operated from motorised crafts.

Fig. 2b. Size composition of *Decapterus macarellus* in the drift net fishery.

A total of 26.5 tonnes of *D. macarellus* was landed during 1990-'91. The season of the fishery was November-March, with a peak during February (Fig. 2a). The fish was caught mainly by drift nets and the bulk (88%) was landed by the gear operated from motorised crafts. The area of fishing was between 40 and 60 m depth. The fish ranged in total length from 28 to 35 m (Fig. 2b). The fishes examined were in maturity stages IV and V.

The emerging fishery of *D. macarellus* in recent years due to the exploitation of deeper fishing grounds by the motorised carfts is an indication of the availability of this species in the non-traditional fishing grounds. However, the resource potential, distribution, biological and population characteristics of this commercially important species need to be studied.

Often D. macarellus is confused with D. macrosoma. The following diagnostic characters could be employed for distinguishing the species in the field.