A NOTE ON THE CATCHES OBTAINED IN HOOKS-AND-LINES BY MECHANISED VESSELS AT SASSOON DOCKS, BOMBAY, DURING 1971

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ABSTRACT

The species composition of the catches obtained in hooks-and-lines by mechanised vessels at Sassoon docks, Bombay, 1971, is presented. The eels (51.3%) and catfish (39.9%) were the major components of the total catch, followed by *Carcharius* spp. (4.6%), Rays (2.0%), *Pomadasys hasta* (1.9%). The rest of the fishes were caught in small quantities, forming less than 1% of the total landings.

Rao (1963) and Pai (1968) respectively deal with short accounts of the line fishery of North Kanara coast and Devipatanam, near Mandapam, Information regarding the catch composition of hooks-and-lines operated from mechanised vessels, however, is lacking. As a part of the survey programme of Fishery Resources Assessment Division, data collected at Sassoon dock, Bombay, form the material for this study. Since the fish caught in hooks and lines are mostly of quality ones, they are in good demand. Machawa-type-of boat, 32 feet in length with 35 h.p., is used for the operation of hooks-and-lines.

A total of 83 boats operating hooks-and-lines were examined for the estimation of the catch composition. The estimated catch was 543.59 tonnes forming 2.3% of the total catch of the year. (The rest of the catch — amounting to 23385.02 t— was by trawl net, dol net and gill net).

The estimated monthly landings by hooks-and-lines in Sassoon docks fluctuated between 8·95 t (September) and 101.36 t (January), with an average landing of 45.29 t per month (Fig. 1). Good catches were obtained between

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December (88.14 t) to February (68.91 t) and maximum in January (101.36 t). The poor catch (catch/unit 1.05 tonnes) and less number of units in operation during monsoon months (May to September) may be attributed to the inclement weather conditions.

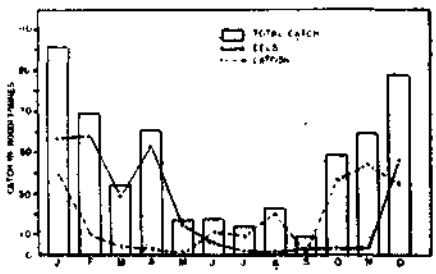

FIG. 1. Seasonal abundance of catch obtained in hook-and-lines by mechanised vessel, and fluctuation of eels and catfish from Sassoon dock, Bombay, 1971.

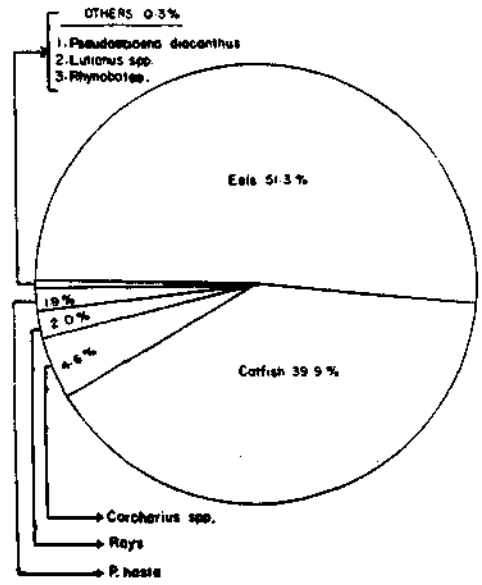

FIG. 2. Annual percentage composition of the catches obtained in hooks-and-lines by mechanised vessels from Sassoon dock, Bombay, 1971.

Eel and catfish formed the major components of the catch. The total catch of eels fluctuated between 1.79 t (August) and 58. 45 t (February). They dominated in the catch from December to May (15.5 t), with maximum in February (58.45 t); thereafter it decreased gradually up to November (13.06 t) (Fig. 1.). Eels took the first place (53. 3%) in the annual catch compositon; they ranked first place in the first (70.9%) and second quarters (78.1%) and second place in third (15.3%) and fourth quarters (26.5%). *Muraenesox talabonoides* was the common species of eels.

The catch of catfish fluctuated between 1.21 (May) and 44.24 t (November). Good catches were observed from October (37.1 t) to January (39.4 t) with maximum in November (44.24 t). From February (9.8 t) onwards it decreased gradually up to May (1.2 t) and again it steadily increased up to August (20.0 t). Catfish ranked second place (339.9%) in the annual catch composition of hooks-and-lines, they dominated in third (66.4%) and fourth (59.0%) quarters and ranked second place in first (26.0%) and second quarters (17.1%).

Carcharius spp. occupied the third place (4.6%) and rays (2.0%) fourth in the annual catch composition as well as in all four quarters. *Pomadasys hasta* was next in importance (1.9%) in the order of abundance in all the quarters. Better catches were observed in the last quarter (3.14%) which is the peak season for this fishery. *Pseudosciaena diacanthus, Rhynobatus* spp. and *Lutianus* spp. were caught in smaller quantities during October to December.

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