

**NOTE ON THE FOOD OF FLYING GURNARD, *DACTYLOPTENA*
ORIENTALIS (CUVIER)**

VERY little is known about the biology of the flying gurnard, *Dactyloptena orientalis* (Cuvier) which has a fairly wide distribution in the Indo-Pacific (Beaufort 1962 and Jones 1965). Presumably, in view of its occurrence in the fish catches in stray numbers it is considered by some as rare (Menon and Rao 1963). On 8-2-1961 the Japanese trawler 'Kaikamorov' conducting experimental fishing off the Karwar Coast in about 20 fathoms area caught about 300 specimens of *D. orientalis* measuring from 130 mm to 205 mm in total length which would indicate its shoaling habit and occurrence in large numbers. Subsequently on 24-2-1964 a specimen 140 mm in total length was caught by the Indo-Norwegian Project vessel KARWAR I from about the same depth. Guts of 30 specimens were analysed and the observations made are recorded in this note.

The volume of the stomach contents ranged between 0.05 ml and 1.05 ml, with the average at 0.27 ml. No stomach was found completely empty. Between the two sexes, males **had not fed** well, as their stomachs were almost empty to half filled, whereas in females the stomachs in most cases were almost full indicating active feeding in them. The average stomach contents of the male and female were 0.187 ml and 0.445 ml respectively.

The stomach contents were examined in detail to determine the relative importance of the different items of food and to find out the food habits. It was noticed that 65% of the fish had fed on young prawns of the size ranging from 14 mm to 25 mm and they formed 78% of the contents, the rest being digested food. 6.5%

of the specimens had juvenile fishes in their stomachs contributing 56% to the diet, the remaining being digested material. Another 6.5% stomachs had a mixed diet of prawns and fish, 37% and 53.5% respectively; the remaining 9.5% being digested food. The fish that occurred in the stomachs were *Cynoglossus* sp. (26-39 mm.) and *Coilia dussumieri* (14 mm.). 3% of the stomachs had small portunid crab to the extent of 75% and remaining 25% was digested food. Remaining 19% of the fish had only digested material in their stomachs. Negligible number of copepods and larvae of bivalves, gastropods and decapod crustacea were also found in their stomachs but their occurrence was very rare. 32% of the stomachs had a few sand grains in them.

The contents observed in the stomachs appear to show the flying gurnard to be a bottom feeder. According to Menon and Rao (*loc. cit.*) the fish 'burrows in sand along stones of inlets and bays and is taken in drag-nets.'

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