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AN ACCOUNT ON LIGHT-FISHING FOR THE CARANGID *SELAR CRUMENOPHTHALMUS**

For the fishermen with outboard motors in many of the fishing centres of Trivandrum District in the southern part of Kerala coast, the new year 1987 was bright at least at its beginning. At these centres, for a fortnight from the 3rd week end of December, 1986, the days dawned with the motorised plank-built boats roaring back to the shore with bulk catches of the bigeye scad *Selar crumenophthalmus*, which were most abundant during the first five days of the new year. The catches were obtained by what is generally termed as light-fishing, where the fish were optically lured to an artificially lighted area near the surface to be fished by suitable gears. Light-fishing has so far been limited in the area experimentally to cephalopods.

Adoption of light fishing for capture of this carangid was incidental. One night, some fishermen fishing from motorised canoes about 20 km away from the shore had kept a bright torch to signal their presence, lest passing boats and ships should hit them. They soon noticed shoals of this fish coming up near the surface apparently lured by the unusually bright light. The news spread among the fishermen and from the next day onwards, the fishing ground 20 to 30 km off these centres became bright at night with hundreds of lighted mechanised crafts fishing around.

The source of light for each craft was 4 to 6 kerosene lamps locally made out of babyfood tin containers fitted on both sides of the canoes in rows so as to project outside above the upper level of the crafts. Burning torches made of kerosene-soaked cloth tied to edges of poles or thick straps of wornout tyres were also used for this purpose. Fishes so enticed by the light to the surface were caught by employing the type of hooks and line known locally as 'achil' (a nylon main line with 10 to 15 short branch lines each having a hook with artificial bait attached to it).

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When a clash between two sections of the people 30 km north of Trivandrum drove many fishermen along with their canoes to the southern part of the district, the fishing fleet in the light-fishing zone was strengthened to about 900 motorised crafts, each intensively carrying out fishing every night until the operation ceased by mid-January when perhaps either the ground was cleared of the stock or the fish driven away to untraceable grounds. The fishing during this period was done at 20 to 30 km from shore at a depth of 85 to 110 m. The catch per unit ranged from 100 to 350 kg. A modest estimate of these catches during the fortnight goes well beyond 2,000 tonnes. The total length of the fish ranged from 205 to 260 mm, with a mean weight of 150 g. The fish were sold at the rate of Rs. 5 to 7 per kg at the landing centres on different days.

A detracting factor related to the fish catch was its kerosene contamination. Evidently, while the fish caught were being dumped into the canoe containing a little quantity of water and drops of kerosene spilled from the engine or the lamps, the fish gasped for breath and in this process the gills seemed to have been clogged with the kerosene droplets. The contamination was to the extent of the flesh exuding an offensive odour and disagreeable taste even after being cooked. This necessitated the merchants to find fresh markets every day, since once having experienced its smell, the consumers naturally avoided it a second time, though it is otherwise a thick-muscled tasty table fish.

After this unusual catch by light-fishing, a similar case of fishing by shore seine has come to light. A high voltage electric search-light, provided at the beach of Valiaveli, a fish landing centre 10 km north of Trivandrum, also attracted the same species of fish to near-shore waters for a period of one month during January-February, 1987. At this centre, 40 to 50 shore-seine operations were made every night with an average catch of 150 kg per unit. The fish was conspicuously absent in the shore seine operations attempted there during day time.