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The unusual landings of juveniles of *Decapterus russelli* and *Rastrelliger kanagurta* in trawl catches of Veraval

Caputre of fish juveniles in trawl nets is a common and regular phenomenon ever since the cod end mesh size has been reduced to less than 10 mm. Generally the cod-end catches are a mixture of juveniles of several species of finfishes and shellfishes, along with a host of inedible benthic biota. The occurrence of a single species in significantly large quantities is seldom found or reported.

In November, 1999, large quantities of young ones of scad, *Decapterus russelli* and mackerel, *Rastrelliger kanagurta* were landed for the first time in the trawl landing centre of Veraval - old lighthouse and Bhidia. The fishing ground was located 13-15 km off Veraval, towards north-west, at a depth of 28-32 m. Approximately 100 units at old light house and 60-70 units at Bhidia trawl landing centres landed nearly 90t of these juveniles during the ten day period from 15/11/99 to 25/11/99 at a catch rate of 500-600 kg/unit effort. The trawl catch composition in November was dominated by ribbon fish, *Ilisha megaloptera*, threadfin breams, bull's eye, sciaenids and *Acetes* spp. with carangids forming 4.16% and scombroids 0.73% *D. russelli* formed 52% of the carangids and *R. kanagurta* 40.5% of the scombroids landed. It was observed that a major part of the juvenile catch came from local trip and two day fishing units. Some quantities of small squids were also noticed.

A sample weighing 3.84 kg. was analysed. *D. russelli* constituted 86.75% of the sample weight, while the remaining by *R. kanagurta*. The ratio of *D. russelli* to *R. Kanagurta* was 1:8 by number. A total of 607 numbers of *D. russelli* and 75 numbers of *R. kanagurta* were measured with the de-

tails as given below.

	<i>D. russelli</i>	<i>R. kanagurta</i>
Length range	56-135 mm	76-100 mm
Modal class	76-80 "	96-100 "
Mean size	75.62 "	93.33 "

Their occurrence in large quantities in shallow water indicate a coastward movement of carangids and young mackerel shoals either due to changes in the current pattern or availability of food components.

The stomach content of analysis of juvenile *D. russelli* revealed the presence of calanoid zooplankton, along with chaetognaths and semi-digested organic matter, while *R. kanagurta* juveniles fed on phytoplankton.

The scads, generally represented by *D. russelli* and locally known as Bangi/Bangdi, form an important carangid resource in trawl net catches at Veraval. During 1998 and '99 it formed 4% of the carangid catch at Veraval. Carangids are known to inhabit bottom water during the daytime, and become vulnerable to bottom trawl net. The occurrence of juveniles of *R. kanagurta* in considerable quantities in the cod end points their bottom-feeding habits in coastal waters. The capture of juveniles of commercially important fishes in large quantities, can cause resource depletion in the long run and hence warrents appropriate management strategies to sustain their stocks.

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