

## Unusual heavy landings of flying gurnards at Munambam Fishing Harbour

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Flying gurnards belongs to the family Dactylopteridae, distributed in tropical Indo-Pacific and Atlantic oceans. From the 7 species representing two genera, *Dactylopterus* and *Dactyloptena* only four species such as *Dactyloptena gilberti*, *D. macracantha*, *D. orientalis* and *D. peterseni* are found in the western Indian Ocean. These are small to moderate sized marine bottom dwelling fish and mostly caught by bottom trawls as by-catch in the near shore waters and not having much commercial value.

On 21<sup>st</sup> January 2016, during regular fishery observations at the Munambam Fishing Harbour, an unusual heavy landing of about 12 tonnes (t) of flying gurnards as by-catch was noted. The fishes were caught by bottom trawls operated off Kochi at depths of 70-100 m depth. The flying gurnards were sorted from the rest of the by-catches estimated at about 40 t and packed separately. As per our observation, the flying gurnards contributed nearly 30-35 % of total by-catch landings of that day. The other species in the by-catch were lizardfish, flatfish, puffer fish, porcupine fish, pink perch, silver bellies, trigger fish, cardinal fish, deep sea shrimp, crabs, eel, scorpion fish, goat fish, red

cornet fish, Indian flathead etc. The fishes were identified as oriental flying gurnard, *Dactyloptena orientalis* and their biology was studied. The specimens ranged from 14.6 - 25.1 cm total length each weighing between 38-194 g. Most of the



Various sized Oriental flying gurnard landed

stomachs were in full condition. Gut content analysis of 32 samples clearly indicated that it had exclusively fed on paste shrimps (*Acetes* spp.). Females dominated in the samples and were of larger size, in various stages of maturity as compared to males. The sorted by-catch of flying gurnards was mostly transported to the fish meal industry of Tamil Nadu, Karnataka and Gujarat in iced condition. Earlier such catches were discarded,



Huge by-catch landed at Munambam Fishing Harbour



Sorted and packed flying gurnards

but presently due to increasing demand from the fish meal industry they are marketed. On the present occasion catch was sold at the rate of ₹ 22 per kg at the landing centre. Flying gurnads

although not used as a food fish, are an important link in the transfer of energy through the marine food chain ensuring food availability to the valuable fishery resources in the higher trophic levels.