

Deformities in finfishes along the coast of Andhra Pradesh

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During regular field surveys, four abnormal fishes were collected from commercial trawl landings at Visakhapatnam Fishing Harbor from March, 2018 to December, 2018. The collected specimens were subjected to thorough clinical examination for the detection of abnormalities. Deformed specimens of *Rachycentron canadum*, *Sphyraena putnamae*, *Fistularia petimba* and *Lepturacanthus savala* were identified and recorded. *Cobia*, *R. canadum* (TL: 380mm) was found to have deformities in the scoliotic, lordotic and kyphotic bends of the posterior part in the vertebral column (Fig.1). In sawtooth barracuda, *S. putnamae* (TL: 360 mm), compression and fusion of vertebral bone resulting in abnormal curvature of vertebrae was observed (Fig.2). A caudal fin deformity was found in the red cornet fish, *F. petimba* (Fig. 3). There was complete absence of caudal fin and its supportive skeletal

elements and the median extension of the caudal fin ray. The tapering part of caudal fin and the posterior part of dorsal fin were not found in Savalai hairtail, *L. savala* (Fig. 4). Both the species (*L. savala* and *F. petimba*) did not possess any scar tissue on the posterior part of their body. In *L. savala*, complete fusion of dorsal fin with posterior part of the body was observed. This indicates the possibilities of skeletal deformity in the caudal portion, and cannot be attributed to have been caused during escape from a predator. Such morphological and spinal deformities are reported in fishes globally. However, further studies are required to decipher the causative factors responsible for such deformities, and its impact on the affected fishes.



Fig.1. Spinal deformity in *Rachycentron canadum*



Fig.2. Spinal deformity in *Sphyraena putnamae*



Fig.3. Caudal fin deformity in *Fistularia petimba*



Fig.4. Deformity in the tail portion of *Lepturacanthus savala*