



# Carangids of Indian Seas



## An Illustrated Pocket Guide for Field Identification



**ICAR - Central Marine Fisheries Research Institute**  
Post Box No. 1603, Ernakulam North P.O.  
Kochi-682 018.

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## *An Illustrated Pocket Guide for Field Identification*

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# Introduction

**Carangidae is one of the largest family under the order Perciformes and are represented by 146 species under 30 Genera globally : Most are highly relished food fishes and many have potential for marine and brackish water farming.**

**From Indian waters, 60 species under 20 genera were reported.**

**Carangids are highly diverse group of fishes characterised by varying body shape and size.**

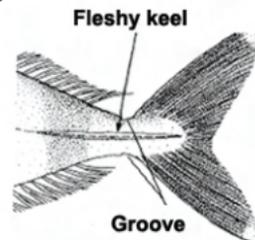
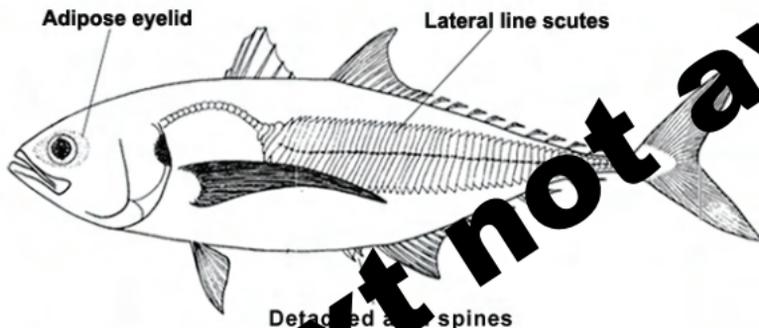
**Members exhibit variation in morphologic & meristic characteristic and colour pattern and even sexual dimorphism, which often leads to mis-identification.**

**This manual was prepared using striking macro-taxonomic characters for field identification of 20 genera and 57 species.**

**Wherever applicable, morphometric and colour changes with growth and also sexual dimorphism are illustrated with pictures.**

## General Characters

Carangids possess either one or combination of characters like detached anal spines, lateral line scutes, fleshy caudal keel, dorsal and ventral groove on caudal peduncle



Source: FAO

Three broad categories based on the morphology of first dorsal fin

Category I : First dorsal fin (ID) absent.

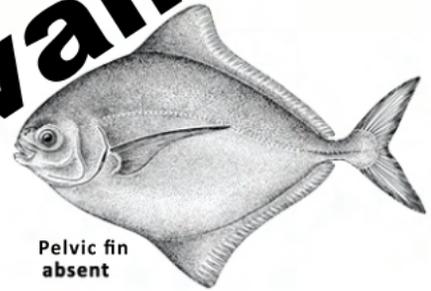
Category II : First dorsal fin (ID) modified in to short spines.

Category III : First dorsal fin (ID) entire and spinous.

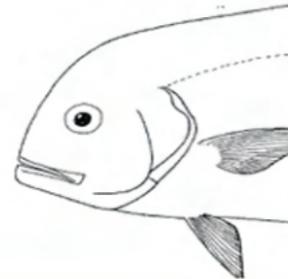
## Category I : First dorsal fin absent

### *Parastromateus*

Pelvic fin absent (in young ones, if present, positioned anterior to pectoral base)



First dorsal fin absent



### *Alectis*

Pelvic fin present, positioned below pectoral.

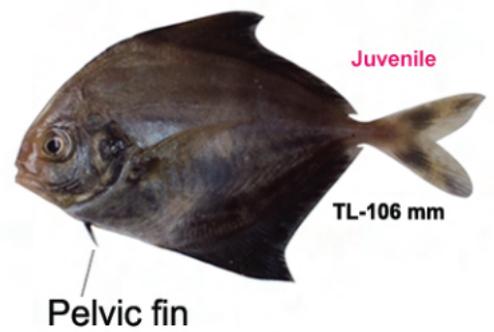
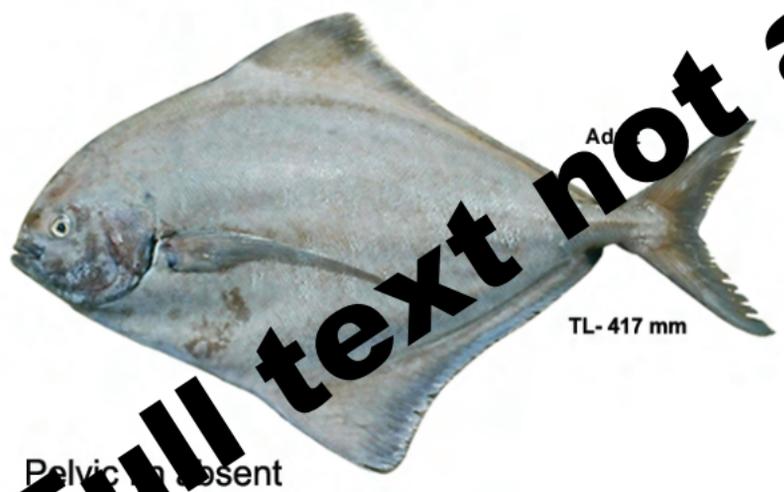
*Parastromateus niger* (Bloch,1795)

Bloch, 1795

Body deep, ovate and compressed

Body uniform silvery grey or bluish brown

Body dark brown with 5 to 6 broad dark bands



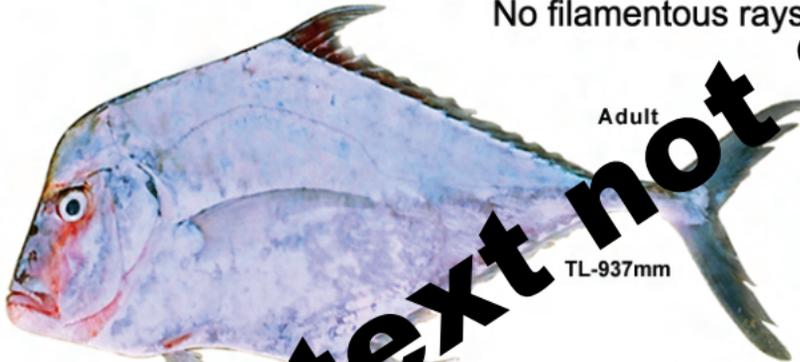
Common fishery length : 30 cm TL

Full text not available

# *Alectis indicus* (Ruppell, 1830)

Indian Threadfish

Profile of head and nape angular



No filamentous rays

Adult

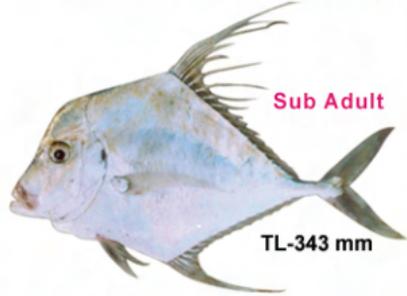
TL-937mm



Juvenile

TL-137 mm

Filamentous rays long



Sub Adult

TL-343 mm

Filamentous rays shortend

Common fishery length : 100 cm TL

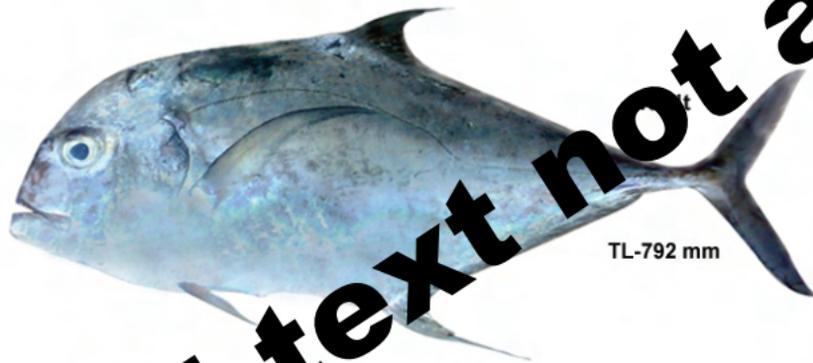
Full text not available

Upper jaw ending below in front of anterior margin of the eye

# *Alectis ciliaris* (Bloch,1787)

African mackerel

Profiles of head and nape broadly rounded



TL-792 mm

Upper jaw extends beyond middle of the eye



Juvenile

TL-125 mm

Long filamentous rays



Sub Adult

TL- 445 mm

Filamentous rays shortend

Common fishery length : 100 cm TL

Full text not available

## References

- Abdussamad, E.M., Prathibha, R. and Mohamed, O.M.M.J.H. (2007) A field identification key for 20 genera of Family Carangidae. *Journal of Marine Biological Association of India*, 49 (2), 41-47.
- Abdussamad, E.M., Joshi, K.K. and Jayabalan, K. (2008) Description of two lesser known jacks of the genus, *Seriola* (Family: Carangidae) from Indian waters and their comparison with a closely related species, *Seriolina nigrofasciata* (Ruppell, 1829) *Journal of Marine Biological Association of India*, 50 (1), 57-61.
- Abdussamad, E.M., Prathibha, R., Saidkoya, K.P., Mohamed, O.M.M.J.H. and Jayabalan, K. (2013) Carangids (Family: Carangidae) in the seas around Indian subcontinent with description of macro-taxonomic characters for the field identification of genera and species. *Indian Journal of Fisheries*, 60 (2). 21-36.
- Dianne J.B. (2007) *Trachinotus coppi* (Fishes of Australia, accessed 20 Feb 2017, fishes of australia.net.au/home/species/2995
- Randall, J.E. (1997) Randall's tank photos. Collection of 10,000 large-format photos (slides) of dead fishes. Unpublished.
- Smith-Vaniz, V.E. (1984) Carangidae. In: Fischer, W. and Bianchi, G. (Eds.) FAO species identification sheets for fishery purposes, Western Indian Ocean (Fishery area 51) Volume I. FAO, Rome.

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