CAPTURE AND CULTURE FISHERIES

INTRODUCTION TO CAPTURE AND CULTURE FISHERIES-RIBBON FISHES

IV SEMESTER MSc ZOOLOGY

MIDHILA MOHAN ASSOSIATE PROFESSOR ON CONTRACT

RIBBON FISHES..



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- ✓ Ribbon fishes are any lampriform fishes in the family Trachipteridae
- ✓ These pelagic fish are named for their slim- ribbon- like appearance.
- ✓ Ribbon fishes or hair tails are ribbon- like silvery fishes with laterally compressed body and prominent sharp teeth.
 - The spinous dorsal fin is continuous, extending to a distance just short of the tip of the tail.
 - Anal fin is absent just represented by several short spines.
 - Caudal fin is present, consist of two fascicles of rays of which the upper is prolonged and directed upwards.

- Pectoral fins are small.
- Pelvic fins are highly reduced to scale-like structures.
- ✓ Though primarily marine species, they may rarely enter estuaries.
- ✓ Ribbon fishes possess all the characteristics of fish living at great depths
- ✓ Their fins especially and the membrane connecting them are very delicate brittle structures.
- ✓ Ribbon fishes in Indian waters are represented by *Eupleurogrammus* intermedius, *E.muticus*, *Trichiurus lepturus* and *Lepturacanthus* savala.

DISTRIBUTION

Trichiurus lepturus

- commonest species in India.
- Enjoy wide distribution from Atlantic coast of Brazil, England, Africa, Red Sea, Sri lanka, China, Japan, Australia and Gulf of California.
- Ventral and caudal fin are absent in this species.
- Anal fin is suppressed .
- Vestigial spines are present on the ventral side, near the vent.
- Canine like and barbed teeth (9-14) in both jaws.

FOOD AND FEEDING: ☐ They are carnivorous and sometimes cannibalistic. ☐ They feed on shrimps and squid fishes including Benthosoma pterotum, Biegmaceros lameolatus were their main food items. ☐ Benthosoma pterotum is the main food item all year around except during summer . ☐ They also show selective feeding behaviour.

☐ No difference between day and night were the feeding activity of Trichiurus lepturus.

Feeding activity and the number of feeding items increased with

Stage

food

Post larvae and juveniles

cephalopods larvae, post larvae and larvae of prawns, shrimps, crabs, acetes etc

Adult

commercially important fish and other organisms i.e. sardinella spp peneaus and metapeneaus prawns, octopus, squid, crab larvae, sepia spp, megalopa larvae.

BREEDING HABITS: ☐ They attain a sexual maturity at a length of 47-4 cm. Spawning of different species at different time On west coast peak spawning season April- June. East coast spawning season February- June. peak in May. ☐ E. intermedius March - April November - December ☐ T. lepturus May - June November- December.

March Anril

AGE AND GROWTH

males grow less than that of female for every species.

Species	year1	year2
E. Intermedius	20.7cm 21. 5cm	31. 6cm male 34.1cm female
T .lepturus	18 cm 21.5cm	30cm male 33.1cm female.

Maximum size of L.salvala 56. 4cm

CRAFT AND GEARS

Gears are used Trawl net, dol net, gill net, seine net , hook etc.

state gears.

Kerala trawl net , gill net, seine net

Andra pradesh trawl net , gill net, seine net

Karnataka trawl net seine net.

Goa trawl net, gill net

Maharashtra trawl net , doll net

Gujarat doll net, gill net

West-Bengal trawl net , bag net, gill net

CRAFT

Motorized and non-motorized catamarans

UTILIZATION

It has low price in the market, so acceptable for poor people as a food used as a cheap protein.

Fish contains 15-30% of protein

Dried ribbon fish also used as fish product.

Frozen and dried fish both are exported to sri lanka and Malaysia .

Pearl essence formed from the guanine(present in skin)