



# केन्द्रीय समुद्री मात्स्यिकी अनुसंधान संस्थान

## CENTRAL MARINE FISHERIES RESEARCH INSTITUTE

भारतीय कृषि अनुसंधान परिषद  
INDIAN COUNCIL OF AGRICULTURAL RESEARCH



### THREADFIN BREAMS

- Threadfin breams (Pink perch)** : Belong to the family Nemipteridae, found in tropical waters of the Indian and western Pacific Oceans, most are benthic carnivores.
- Habitat** : Marine, demersal; abundant in 100 - 200 m depth
  - Classification** :
    - Class - Actinopterygii
    - Order - Perciformes
    - Suborder - Percoidei
    - Family - Nemipteridae
    - Genus - *Nemipterus* (Threadfin breams)  
*Parasclopsis*, *Scolopsis* (Monocle breams)  
*Pentapodus* (Whiptails)
  - Major species in commercial fishery** : *Nemipterus mesoprion* (Bleeker, 1853) – dominant along west coast  
*Nemipterus japonicus* (Bloch, 1793) - dominant along east coast  
*Nemipterus bipunctatus* (Valenciennes, 1830) – <10% contribution
  - All India annual average production ('99-09)** : 1.2 lakh tons (23 % of all India Marine Fish landings)
  - Local name** : Kilimeen (Malayalam), Madhumal meenu (Kannada), Rani (Marathi), Gulivindalu (Telugu)
  - Utilization** : Marketed mainly fresh/iced for local human consumption and also as raw material for surimi manufacture for export



*N. mesoprion* landed at Munambam Fisheries Harbour (Kerala)



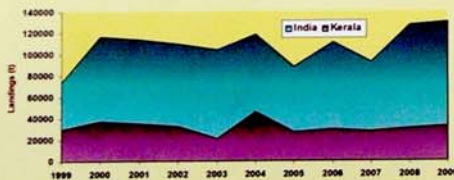
Juveniles of *N. mesoprion* landed at Cochin Fisheries Harbour

*N. bipunctatus* juveniles landed at Cochin Fisheries Harbour

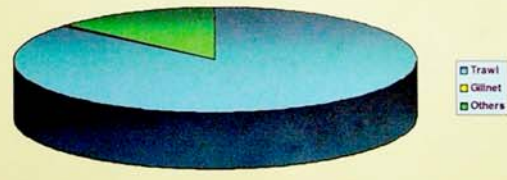
Contribution of threadfin breams in all India marine fish landings (1999 - 2009)



Trends in Threadfin bream landings (1999- 2009)

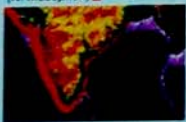


Gearwise Threadfin bream landings in Kerala (2009)



#### *Nemipterus mesoprion* (Bleeker, 1853) (Red filament threadfin bream)

Distribution along Indian coast (*N. mesoprion*)

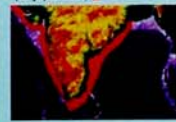


#### Fishery and population parameters of *N. mesoprion* off Kerala

<b>Peak landing season</b>	: August - January	<b>Trophic level</b>	: 3.61 ± 0.54
<b>Length range in fishery</b>	: 50 - 290 mm	<b>L<sub>∞</sub></b>	: 299 mm
<b>Mean size in fishery</b>	: 136 mm	<b>K/year</b>	: 0.69
<b>Peak spawning period</b>	: June - October	<b>Tmax</b>	: 4.6 years
<b>Absolute fecundity(Av.)</b>	: 85,600	<b>Z</b>	: 4.72
<b>Recruitment period</b>	: July - November	<b>M</b>	: 1.4
<b>Food items</b>	: Small fishes (flathead, <i>Saurida</i> sp., <i>Bregmaceros</i> sp., <i>N. mesoprion</i> ), <i>Acetes</i> , deepsea prawns, crabs, squilla, squid	<b>F</b>	: 3.32
		<b>E</b>	: 0.7
		<b>Length-weight relationship</b>	
		<b>a</b>	: - 4.3
		<b>b</b>	: 2.8
		<b>Exploitation status</b>	: Above optimum level

#### *Nemipterus japonicus* (Bloch, 1791) (Japanese threadfin bream)

Distribution along Indian coast (*N. japonicus*)



#### Fishery and population parameters of *N. japonicus* off Kerala

<b>Peak landing season</b>	: August - September	<b>Trophic level</b>	: 3.77 ± 0.2
<b>Length range in fishery</b>	: 100 - 300 mm	<b>L<sub>∞</sub></b>	: 320 mm
<b>Mean size in fishery</b>	: 197 mm	<b>K/year</b>	: 0.65
<b>Peak spawning period</b>	: June - August	<b>Tmax</b>	: 4.6 years
<b>Absolute fecundity(Av.)</b>	: 93,380	<b>Z</b>	: 4.24
<b>Recruitment period</b>	: July - September	<b>M</b>	: 1.32
<b>Food items</b>	: Small fishes ( <i>Epinephelus diacanthus</i> , <i>N. mesoprion</i> , flathead - <i>Callionemus</i> sp., <i>Saurida undosquamis</i> , ribbon fish, <i>Bregmaceros</i> sp.), <i>Acetes</i> , deepsea prawns, squilla, squid, octopus	<b>F</b>	: 2.92
		<b>E</b>	: 0.68
		<b>Length-weight relationship</b>	
		<b>a</b>	: - 4.07
		<b>b</b>	: 2.7
		<b>Exploitation status</b>	: Above optimum level