

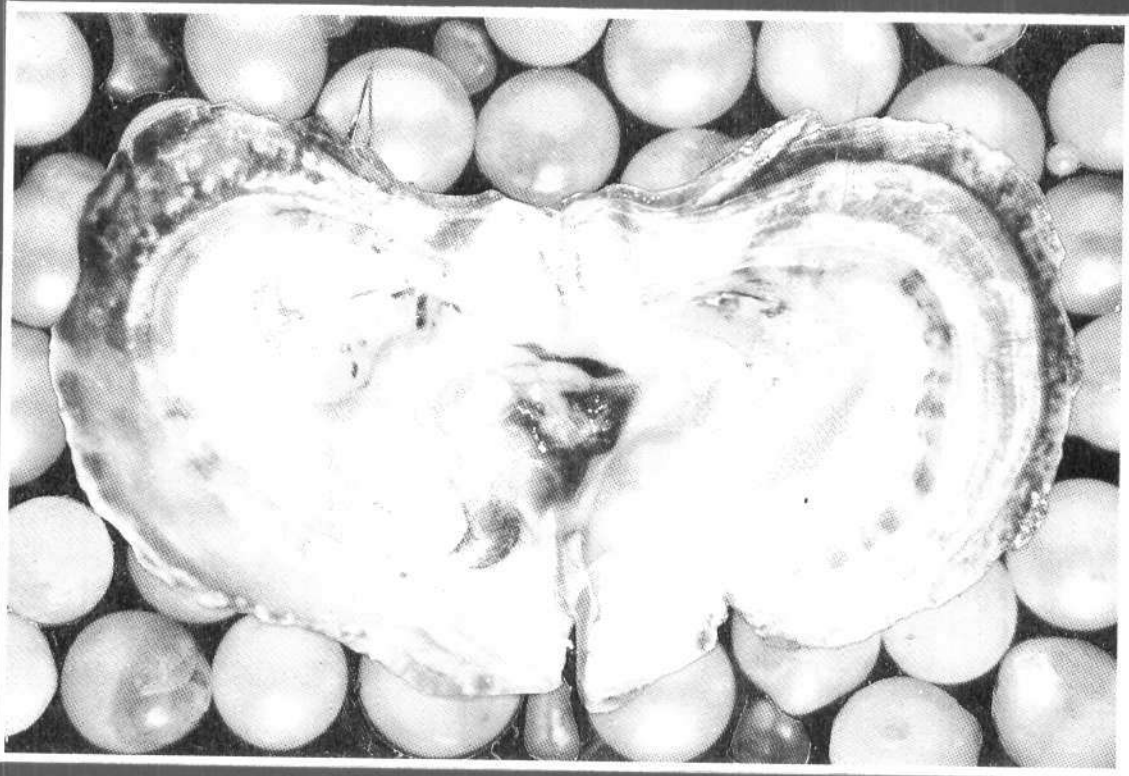


# समुद्री मात्स्यकी सूचना सेवा

## MARINE FISHERIES INFORMATION SERVICE

No. 143

JUNE, JULY, AUGUST 1996



तकनीकी एवं TECHNICAL AND  
विस्तार अंकावली EXTENSION SERIES

केन्द्रीय समुद्री मात्स्यकी CENTRAL MARINE FISHERIES  
अनुसंधान संस्थान RESEARCH INSTITUTE  
कोचिन, भारत COCHIN, INDIA

भारतीय कृषि अनुसंधान परिषद  
INDIAN COUNCIL OF AGRICULTURAL RESEARCH

## Sardines landed with eyes missing\*

During the routine observations for sardines at the Tuticorin south landing centre on 02-02-'96 an unusual occurrence of eyeless sardines was noticed. Of the total landings of around 4 tonnes of lesser sardines of that day, all the fishes had their eyes scooped out (Fig. 1). On the next day it was observed that all the sardines landed at this centre were normal with both their eyes intact.

From this centre 55 catamarans operate and the fishing ground is reached by around 0430 hrs. The nets are operated for 3 hrs at the same ground. On

the day in citation, sardine nets were operated off south of Tuticorin Harbour in the 10 m depth zone for 3 hrs in the early morning by 55 units. The nets were operated only once.

Average catch of per unit was 61.5 kg of sardines comprising *Sardinella albella*, *S. gibbosa*, *Thrissocles mystax* and *Therapon jarbua* (Table 1).

TABLE 1. Catch, catch per unit effort and percentage composition of lesser sardines at Tuticorin south landing centre in February 1996. No. of units operated: 55

Species	Catch (kg)	CPU (kg)	%
<i>Sardinella albella</i>	2,915	53.0	86.1
<i>Sardinella gibbosa</i>	265	4.8	7.8
<i>Thrissocles mystax</i>	165	3.0	4.9
<i>Therapon jarbua</i>	39	0.7	1.2
Total	3,384	61.5	

Based on the average weight of each sardine it is presumed that 1.3 lakhs of sardines were caught on that day. The eyes of all the fishes were missing. From the fresh condition of the fish, firmness of flesh, and bright red colour of the gill it could be inferred that loss of eyes had taken place within two hours before landing.

Fishermen attribute this loss of eyes of the sardines to the fish *Therapon jarbua*. Some carnivorous fish might have eaten away the eyes, but there is no evidence to confirm it. It is not uncommon to come across a few or a few hundreds of sardines with their eyes missing but to see the entire fish catch without eyes is unknown. There were some *Therapon* fishes in the catches forming 1.2% and they measured from 100 to 108 mm in total length. Whether the predatory shoal was large enough to eat away the eyes of each sardine in that ground is also not known.

I am grateful to Mr. A. Bastian Fernando, Technical Officer for going through the manuscript and offering valuable suggestions for its improvement.

\*Reported by G. Arumugam, Tuticorin Research Centre of CMFRI, Tuticorin - 628 001.

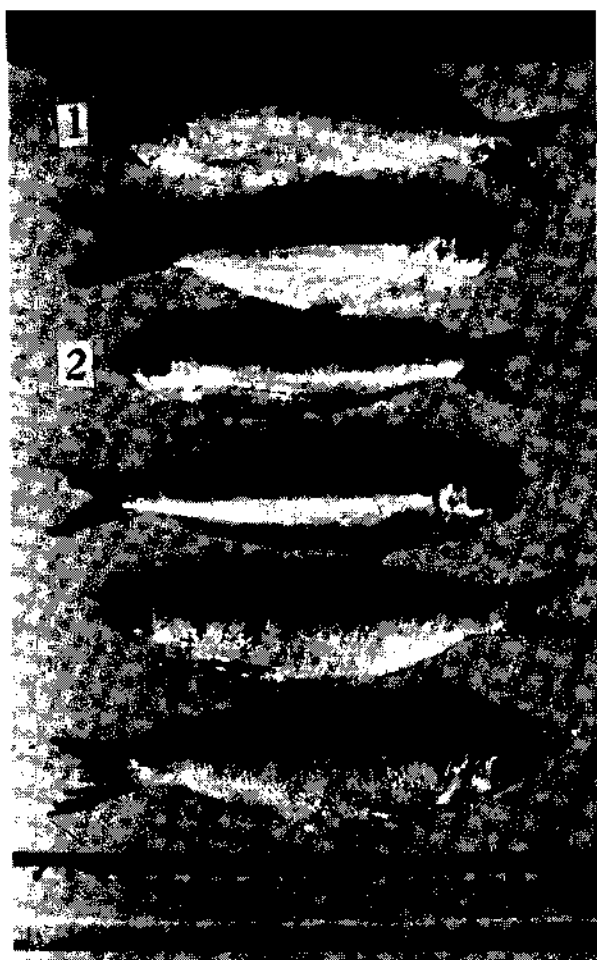


Fig. 1. A sample of sardines deprived of eyes on both sides. They belong to species *Sardinella albella* (top two specimens), *S. gibbosa* (middle two specimens) and *Thrissocles mystax*.