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R. V. CORELLA

Report for Cruise 10/1969

Staff: D. Harding Duration: 30 May - June 9
 D. S. Tungate 1969
 J. H. Nichols
 J. C. Adamson

Part time

Mr. Fong Shek-Kong (Hong Kong) (Part 1)
E. G. Shreeve
B. F. Riches

Objectives

- Vertical distribution studies using the Lowestoft multiple plankton sampler fitted with a changing net mechanism and a sledge sampler for collections near the bottom.
2. Further tests with the Boothbay net.
3. Gear trials with the Lowestoft Multiple Plankton Sampler:
 - (a) Cover tests
 - (b) Filtration tests with a new net design.
4. Trials with a Longhurst-Hardy sampler fitted as a codend to the Lowestoft Multiple Plankton Sampler.
5. Comparative fishing tests with a 20" Lowestoft Plankton Sampler and the German uncased "Hai" sampler.

Narrative

CORELLA sailed from Lowestoft at 0915 hours, 30 May. Mr. Shreeve and Mr. Riches sailed with the ship to test the electronic underwater units in the plankton samplers and were put ashore at 1600 hours at Gorleston by pilot boat.

Gear was rigged on passage to $53^{\circ}06' 30''N$, $03^{\circ}45'E$ and sampling commenced along a line of stations north north east to $54^{\circ}36'N$, $04^{\circ}45'E$ at 0023 hours, 31 May. Samples with adequate larvae for the vertical distribution studies were found between stations 16 and 18 and work thereafter centred on station 17 at $54^{\circ}30'N$, $04^{\circ}45'E$.

The electronic unit on the changing net sampler failed at the first attempt to take a series of vertical samples and the fault could not be rectified. Therefore, tests for "clogging" and "escape" were carried out with the standard 30" T.T.N. instead. Communication with Electronics Section by radio on 2 June concerning the electronics units resulted in the ship returning to Yarmouth Roads on 3 June and Mr. Shreeve joined the ship, replacing Mr. Fong Shek-Kong, for the remainder of the voyage. Work continued with comparative tests with the German "Hai" and a Lowestoft 20" sampler whilst Mr. Shreeve serviced the electronic units in both samplers.

Unfavourable weather prevented further work on the afternoon of 3 May and it was decided to put in to IJmuiden. Here the remainder of the gear for test was mounted and the electronic faults finally traced. The Dutch laboratory was visited and Mr. Tungate and I had an afternoon of discussions with Dr. Zijlstra concerning a cooperative sampling programme for larval fish in the North Sea and about plankton sampling gear.

CORELLA sailed from IJmuiden at 0800 hours, 5 June and returned to 54° 30' N, 04° 45' E sampling plankton near the bottom en route.

Between 5 and 8 June the remainder of the work programme was completed, including a twenty-four hour series of samples to determine the vertical stratification of planktonic fish larvae. The Boothbay Net was used after this series and caught numerous fish larvae near the bottom. Late stage plaice and cod larvae were particularly abundant in these samples, some still alive. The Longhurst-Hardy pattern codend was also tested successfully in the 30" T.T.N. Live Calanus was collected for Mr. Lincoln at the University of East Anglia.

CORELLA docked at Lowestoft at 0630 hours on Monday 9 June.

D. Harding

Seen in draft: W. C.

Initialled: A. J. L.

Distribution:

Basic list, plus the following:

Mr. Harding
Mr. Tungate
Mr. Nichols
Mr. Adamson
Mr. Fong Shek-Kong
Mr. Shreeve
Mr. Riches