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Analysis of the productivity data from the September, Honolulu, intercalibration trials by Maxwell S. Doty

PREFACE TO THE INTERCALIBRATION REPORT

In scientific programmes requiring international cooperation, the question of the relative value of different methods often arises. The adoption of one standard method, removes from the task of the atlas-compiler or of the scientist trying to use the results, the complication of trying to assess whether observed differences are real or whether they are artefacts produced by differences in method. However, the adoption of a standard method may lead to great expense in purchase of new apparatus when already good working equipment is available. An alternative to standardization is inter-calibration, but this has the difficulty that either samples must be exchanged, or that the different sets of apparatus must be brought together for the comparisons to be made.

These problems have arisen during the preliminary stages of the SCOR - UNESCO sponsored investigations of the Indian Ocean and in the case of methods for determining nutrient salt concentration and for determining the intensity of primary production, it was decided to attempt to inter-calibrate the methods which will be used. It was known that invitations had been extended to many laboratories to send ships to the Tenth Pacific Science Congress at Honolulu (August 21 - September 2) and that many of these laboratories would be participating in the investigations of the Indian Ocean. Therefore it was decided by SCOR and UNESCO to hold the inter-calibration tests at Honolulu just after the Congress and thus to take advantage of the presence of the oceanographic ships.

National Committees on Oceanic Research were asked to nominate participants so that where necessary they could be brought to Honolulu with the apparatus they would use in the Indian Ocean. Those who took part in the tests were:-

Mr. V. Alvarez, Bureau of Fisheries, Philippines
Mr. A. Soegiarto, Oceanographic Institute, Djakarta, Indonesia
Mr. H. R. Jitts, C.S.I.R.O. Division of Fisheries and Oceanography, Australia
Dr. O. Koblentz-Mishke, Academy of Sciences, U.S.S.R.
Mr. M. Oguri, Botany Department, University of Hawaii, U.S.A.
Dr. R. R. Prasad, Fisheries Research Station, Mandapam, India
Dr. Y. Saijo, Nagoya University, Japan
Dr. Y. Sorokin, Academy of Sciences, U.S.S.R.

The tests were made under the direction of Professor M. S. Doty who deserves much thanks for the time and thought he has devoted not only to the work but also to this comprehensive report and analysis of results.

(G. F. HUMPHREY)
President of SCOR