

PROCEEDINGS OF THE SYMPOSIUM ON CORALS AND CORAL REEFS. Mukundan, C. and C. S. Gopinadha Pillai (Eds). 1972. Published by the Marine Biological Association of India, Cochin. XXII + 591, Price : Rs. 225/-.

The proceedings represent a collection of papers presented at the First International Symposium on Corals and Coral Reefs held at Mandapam Camp on 12-16 January, 1969. The papers are arranged in seven sections related to various aspects of corals and coral reefs.

The first section, on the productivity of coral reefs, contains four papers by Yonge, Kinsey, Pillai and Nair, and Nair and Pillai. Yonge's paper is a review on the various aspects of primary productivity of coral reefs, while the others deal with the actual measurements of productivity in reefs and of individual corals. Though several of these papers do not add substantially to our knowledge, they are useful because of the records and discussions on several aspects of productivity of coral reefs they contain. The second section is on the trophic structure in coral reefs. The two papers, by Nelson Marshall on the mucus and zooxanthellae discharged from reef corals and by Disalvo on microbial ecology are preliminary reports. However, their studies are interesting and indicate the lines along which future work could possibly be undertaken.

The third section, on the distribution of corals in reefs, contains five papers. Stoddart reviews sampling methods in studying coral distribution; Berthel describes Upper Jurassic coral reefs in

South East Germany; Scheer describes some atolls in Maldive Islands and the application of sample squares method to study coral sociology; Yamazato relates bathymetric range of reef corals and latitude, and Michel Pichon gives a description of coral reefs in Tulear. The fourth section deals with the coral reefs of Indian Ocean. Considering the paucity of information so far available on the corals and coral reefs of the Indian Ocean, the material presented in six papers is a welcome addition to our knowledge on the subject. Stoddart reviews the earlier works on the Indian Ocean coral reefs, Pillai provides a checklist of coral species in the seas around India, Sukarno gives a preliminary account of the coral reefs in Indonesia, Rao contributes to an understanding of the reef flora, Mahadevan and Nagappan Nair emphasize the measures to be taken against indiscriminate exploitation of the coral reefs and Rajendran and David give an account of the coral reefs in and around the Gulf of Mannar islands.

The next two sections treat the coral reefs as biotopes. The former, with reference to invertebrates, contains ten papers dealing with the zooplankton of reef waters and the various other groups of invertebrates associated with the coral reefs such as hydroids, sponges, nemerteans, molluscs, pontonid shrimps, brachyuran fauna and boring molluscs and sponges. The latter section, with

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reference to vertebrates, contains four papers, dealing with the biology and ecology of reef fishes. These papers will be useful for workers in the respective fields and will help in understanding the interaction between the reef and their associated fauna. The last section covers the geomorphology of the reefs and the islands. Fosberg presents a hypothesis relating all the surfaces and landforms appearing in the Aldabra Atoll in a definite geomorphic cycle. Chevalier describes the origin, types and functional states of the 'hoas' (shallow channels notched in the reef rim) in Tuamotu Atoll. Dexter gives some excerpts from Agassiz's lectures in 1861 on the origin of Florida coral reefs.

Denizot discusses the role of algae in the construction of reefs and MacNeil deals in detail with the physical and biological aspects of atolls.

This volume has a collection of several important papers relating to various branches of corals and their ecology. The Symposium was the first attempt to incorporate all major aspects of coral research and its success is reflected from the several articles giving original data and information. The volume is well edited and reasonably priced and will be useful for students and specialists alike and will serve as a valuable addition to libraries dealing with marine sciences.

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