International Indian Ocean Expedition

Cruise B of the R/V TEVEGA February - May 1964; Colombo, Ceylon to Port Louis, Mauritius

Report of participation and field notes of:
Harold E. Hackett, phycologist
Department of Botany
Duke University
Durham, North Carolina

Total number of collecting stations - 41
ship stations (dredged or planktonic material - 10)
shore stations
littoral and tidepool material - 13
sublittoral reef material - 18

- Nature of collections: Representatives of all species of algae and marine vascular plants from each station were collected so far as was possible.
- Station numbers: Where the following collecting stations corresponded with official expedition stations, the official collection number follows the algal collecting number.
- Field Notes: No attempt will be made at the present time to list the specimens collected. Little identification was done on ship board.

SHIP STATIONS

- 1A. 3-15-64 between Ceylon and the Maldive Islands, Lat. 6 10 N. Long. 77 58 E. 18:00, Pelagic Sargassums
- 1B. -120. 3-22-64, Maldive Islands, Male Atoll Lagoon, Lat. 4 32-35' N, Long. 73 34'E, 11:00, 6'beam trawl, 30-33 fathoms.
- 1C. -122A. 3-25-64, Maldive Islands, Fadiffolu Atoll, East of Loli and Lowalafuri Islands, Lat. 5 20'N, Long. 73 29'E, 16:00, 6' beam trawl, 25-35 Fathoms.
- 1D, -122B. 3-25-64, Maldive Islands, across the SW boundary of Fadiffolu Atoll Lagoon, Lat. 5 18'N, Long. 73 29'E, 18:30, 6' beam trawl, 25-35 fathoms.
- 1E. 3-27-64, Maldive Islands, Miladummadulu Atoll Lagoon, 200 yards W of Kendikolu Island, Lat. 5 57°N, Long. 73 24°E, 15:00, 2° wire dredge, 25 fathoms.
- 1F. -124. 3-29-64, Maldive Islands, Miladummadulu Atoll Lagoon, Lat. 5 58'N, Long. 73 19'E, 11:30, 6' beam trawll 36 fathoms.

- 1G. 4-1-64, W of extreme southern tip of India, edge of the discolored water, 13:30, plantonic Chrysophyta inconvergence lines
- 1H. 4-11-64, India, mouth of Cophin Harbor, plantonic Chrysophyta
- 1I. 4-21-64, Maldive Islands, N Malos madulu Atoll Lagoon near Ongu Island, Lat. 5 41 'N, Long. 73 0'E, 15:00, 2' wire dredge, 22 fathoms
- LJ. 5-5-64, Maldive Iglands, Addu Atoll Lagoon, just N of Gan and Fedu Islands, Lat. 0 41 S, Long. 73 9 E, 8:00, 2 wire dredge, 20-25 fa-thoms.

SHORE STATIONS

Littoral and tidepool Collections:

- 3A. 2-15-64, Mount Lavinia, Ceylon, Gnoiss rock in heavy surf.
- 3B. 2-21-64, Colombo, Ceylon, at the Galle Face Hotel, rock in heavy surf.
- 3C. 2-21-64, Mount Lavinia, Ceylon, one-half mile off shore near top of reef.
- 3D. 2-27-64, Mount Lavinia, Ceylon, one-half mile off shore near top of reef.
- 3E. 2-28-64, Beruwala, Ceylon, 11:00, exposed reef surface in surf.
- 3F. 3-1-64, Colombo, Ceylon, at the Galle Face Hotel, 9:00, beach and Sabellariid rock in surf.
- 3G. -115. 3-4-64, Galle, Ceylon, S side of Fort wall, 10:00, on Granitic rock and coral debris.
- 3I. -117. 3-17-64, Maldive Islands, Male Atoll, Dunidu Fa ro Lat., 4 11'30"N, Long. 73 30'15"E, beach rock.
- 3H. 3-7-64, Hikkaduwa, Ceylon, 14:00, beach rock flat.
- 3J. -118. 3-19-64, Maldive Islands, Male Atoll, Imma Island. Lat. 4 18'30"N, Long. 73 34'E, grass flats.
- 3K. 3-31-64, Maldive Islands, Tiladummati Atoll, Filadu Island, Lat. 6 55'N, Long. 73 10'E, 10:00, a coral rubble bool at the edge of the island reef.
- 3L. 4-28-64, Maldive Islands, Addu Atoll, Gan Island, Lat. 0 41-18, Long. 73 9'E, beach rock.

3M. 4-19-64, Maldive Islands, Male Atoll, Dunidu Faro, Lat.4 11 30 N, Long. 73 30 15 E, beach rock scrapings.

Reaf and Sublittoral Collections:

2A. -117. 3-17-64, Maldive Islands, Male Atoll, Dunidu Faro,
Lat. 4 11'30"N, Long. 73 30'15"E, 4-10'water, coral reef.

- 2B. -119. 3-21-64, Maldive Islands, Male Atoll, Imma Island Lagoon, Lat. 4 18'30"N, Long. 73 34'E, water Temperature 31.1 C, "Scattered coral patches in 1-2'water.
- 2C. 3-22-64, Maldiwe Islands, Male Atoll, Kagi Island, Lat. 4
 40'N, Long. 73 29'40"E, coral reef in 5'water.
- 2D. 3-23-64, Maldive Islands, Fadiffolu Atoll, chanel between Maro and Mafilefuri Islands, Lat. 5 21'30"N, Long. 73 25'24"E, 15:00, 2'deep, sand and coral rubble in current.
- 2E. -121, 3-24-64, Maldive Islands, Fadiffolu Atoll, chanel between Maro and Mafilefuri Islands, Lat. 5 21'30"N, Long. 73 25'24"E, algal turfs from dead corals and mangrove roots.
- 2F. 3-27-64, Maldive Islands, Miladummadulu Atoll, Kendikoluda Island, Lat. 5 57'N, Long. 73 24'E, coral reef in 12'water.
- 2G. 3-28-64, Maldive Islands, Miladummadulu Atoll, Kendikoludu Island, Lat. 5 57'N, Long. 73 24'E, patch reef in 2'water.
- 2H. 3-31-64, Maldive Islands, Tiladummati Atoll, Filadu Island, Lat. 6 55'N, Long. 73 10'E, 10:00, coral reef in 15'water.
- 2I. 4-19-64, Maldive Islands, Male Atoll, Dunidu Faro, Lat. 4 11'30"N, Long. 73 30'15"E, coral reef in 3'water.
- 2J. -129. 4-21-64, Maldive Islands, North Malos madulu Atoll, Ongu Island, Lat. 5 41'N, Long. 73 0'E, coral reef in 3-10'water.
- 2K. -130. 4-22-64, Maldive Islands, Ari Atoll, Nameless Island, Lat. 4 6'N, Long. 72 45'E., reef in 5'water,
- 2L. -132. 4-24-64, Maldive Islands, South Nilandu Atoll, Wala Faro Lat. 2 42'N, Long. 72 55'E, coral reef in 4'water.
- 2M. 4-23-64, Maldive Islands, South Nilandu Atoll, Kuda Huvadu Island, Lat. 2 42'N, Long. 72 55'E, surf collection.
- 2N. 4-30-64, Maldive Islands, Addu Atoll, Wilingili Island, Lat. 0 41'S, Long. 73 11'E, water temperature, 29.2 C. Coral reef in 2'water.
- 20. 5-4-64, Maldive Islands, Addu Atoll, Gan Island, Lat. 0 41'S, Long. 73 10'E, 3'water, rubble near pier.

- 2P. 5-8-64, Maldive Island, Addu Atoll, a small island near Fadu, Lat. 0 41'S, Long. 73 9'E, grass beds in coral rubble., current in 2'water.
- 20. 5-10-64, Maldive Islands, Addu Atell, Bushy Island, Lat. 0 40'S, Long. 73 10'E, coral rubble in 3'water.
- 2R. 5-25-64, Mauritius Island, 3 miles north of Port Louis, coral reef in 15 water.

Distribution of the Collections: Dank

The marine grasses will be sent to Dr. Edward Chin, Woods Hole, and members of the genus Halimeda to Dr. Edward Chin, Woods Hole, University. The algae of the Maldive Islands will be used in the preparation of a thesis by this participant. The remaining collections will be studied in a similar manner after the preparation of the primary paper.

Deposit of Specimens:

collections have been made so that several sets should be available. In following the recommendation of the committee on algae at the conference on the Sorting Center of the Smithsonian, one collection will be deposited in the National Museum, including paratypes or co-types of new species. Another set will be deposited at the herbarium of the Department of Botany, Duke University.

Additional Collections

One hundred twenty-five specimens of land vascular plants, Bryophytes, and Lichens were made for the herbarium of the Department of Botany, Duke University.