

**FIRST OBSERVATIONS OF A MAJOR CORAL BLEACHING IN NEW CALEDONIA
(POSTER)**

RICHER de FORGES B. and GARRIGUE C.

ORSTOM, BP. A5, 98848 Nouméa Cedex, New Caledoni

The bleaching phenomenon, observed under conditions of physical stress was first reported in 1931. Until 1979 it was rarely observed. During the last fifteen years coral bleaching has been observed world-wide. New Caledonia, located between 18 and 21°S, possesses extensive coral reefs. Until present these reefs have been spared bleaching, probably due to the fact that the water temperature stays below 28°C during summer. In 1995 the observed mean temperature was superior to those of the previous 30 years. From December 1995 to March 1996 the sea temperature reaches 29°C in the SW lagoon. The first sighting of bleaching was observed in January on the fringing reefs of Nouméa Peninsula. At the end of February, a vast bleached zone was observed in shallow waters (1.5 - 3 m) and spread over more than 90 % of the surface of the fringing reefs. On the 6/7 of April during the low tide, a large part of fringing reef flats was exposed permitting an easy observation (Photo). Most of the coral was completely white, some displayed bright blue, green or pink. Others were dead and covered by green algae. The main genera affected were branched *Acropora*, encrusted *Montipora* and massive *Porites* and Faviidae. Alcyonarian from the genus *Sarcophyton* that are normally grey also turned white. The same location was revisited one year later (April 1997), the previously bleach area was completely dead and all branched corals were covered with red algae. The bleaching phenomenon was observed on all fringing reefs around the main island (Thio, Nepoui, Goro...), from the north to the south. Furthermore some isolated cases of coral bleaching (*Montipora*) were observed on the outer slope of the barrier reef at depths of 50 m.

Richer de Forges Bertrand, Garrigue Claire.

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