

SPC/ICHT/WP.22
19 August 1968

SOUTH PACIFIC COMMISSION

SEMINAR ON ICHTHYOSARCOTOXISM
(Papeete, French Polynesia, 16 - 22 August 1968)

ABSTRACT

CIGUATERA-TYPE FOOD POISONING ON THE ISLAND OF REUNION (1966-67)
AND J. MORICE'S THEORY REGARDING THE ORIGIN OF THE TOXICITY
OF SOME TROPICAL FISH SPECIES

by

Alain Lebeau
Laboratory researcher
Scientific and Technical Institute
of Marine Fisheries
St Denis, Reunion Island

1. On the Indian Ocean island of Reunion, the consumption of tropical fish caught either locally (by small fishermen) or on the banks of Saya de Malha, some 700 nautical miles to the north, caused several cases of ciguatera-type poisoning. The species involved are named; they are mainly Serranidae, Lutjanidae and Carangidae. The actual incidence of fish poisoning has not yet been estimated.

2. A possible explanation of the toxicity of some tropical fish species is given. Although no systematic testing of this hypothesis has yet been undertaken, the author deems it worthwhile to summarize the observations made from 1961 to 1964 by Morice on St Bartholomew Island (French West Indies). These suggest that the toxicity of some of the fish might be connected with the presence of skull lesions, severe in some cases. Such lesions may be caused by a micro-organism carried by isopodous crustacea which are parasites of the branchial cavity and nostrils and are frequently encountered in many species. We believe we have found such lesions in fishes in the Indian Ocean and on the coast of Tahiti.

Original text: French