

Poisonous fish research at the Hawaii Marine Laboratory of the University of Hawaii. Above: Dr. Philip Helfrich, biologist, and Mr. Robert Morris, assistant, measuring poisonous red snappers from Majuro, Marshall Islands. Right: Dr. Helfrich and Dr. A. H. Banner (whose letter appears below), discussing one of the specimens with Dr. Satoshi Sasaki, biochemist.



Fish Poisoning Reports Wanted For University of Hawaii Study

TO THE EDITOR

Sir—Several years ago you ran an interesting article on poisonous fish in the Pacific.* Since that time some advances have been made in the knowledge of the poison, and the poisonous fish have been divided into at least two groups, those that are almost always toxic, no matter where found, and those that are toxic only in certain areas. The toxins of the fish in the first group, which include those from the puffer or blow fish, have been isolated by the Japanese; little is known about the origin, or type of toxin, and geographic spread of the fishes in the second group.

* POISONOUS FISH OF THE SOUTH PACIFIC, by Guy Loison, SPC Quarterly Bulletin for October, 1955.--Editor.

Plant Introduction In Guam And Trust Territory

Guam and the United States Trust Territory of the Pacific Islands have asked the Commission's plant introduction section to provide planting material of cash crops, including cacao and black pepper, of food plants suitable for atoll conditions, of vegetable varieties suitable for truck gardening in the tropics, and of tropic pasture plants. A group of us at the University of Hawaii are studying the geographic type of fish poisoning. This is found in red snappers, groupers, jacks and barracuda, and the fish are characteristically found to be toxic within rather narrow geographic limits, and harmless in adjacent areas. We are approaching the problem from two distinct aspects: on one hand we are attempting to isolate and identify the toxic components; on the other, we are trying to develop a field test that will permit us to visit areas showing this regional toxicity to determine what factors in the environment make the fish toxic.

For our studies we would like to obtain as much information as possible about the geographic spread of this type

Requests for this material were received by the Commission's plant introduction officer, Dr. Jacques Barrau, during a three-month visit he made earlier this year to islands of the Caroline, Mariana, Mortlock and Palau Groups. Main objects of his visit were to continue his surveys of economic plants in the Pacific, and to discuss with the local authorities ways in which the Commission could best assist them in introducing new crops. of toxicity, both for any clues it might give us as to the cause and for aid in the selection of a site for our field studies.

As your *Bulletin* is widely circulated in the tropical Pacific and comes into the hands of administrators and medical personnel, we would like to use its columns to request information about cases of this type of poisoning.

We would like to know in which areas this type of poisoning is prevalent and whether severely toxic fish are localized within narrow limits or widespread; the types of fish suspected of being toxic; the sources of information about the toxicity, whether native or medical; how long the toxic areas have been toxic, and whether they have remained consistently toxic over a period of years; and finally, any medical reports of actual cases of poisoning.

We will welcome all correspondence about the poison fish problem.—Yours, etc.,

> Albert H. Banner, Director.

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During his visit Dr. Barrau was also able to continue the research he is now carrying out to extend breadfruit harvest seasons in the South Pacific. He studied the local varieties of the breadfruit tree, of which there is a particularly wide range in Truk and Ponape Islands.

It is now planned to introduce into the Trust Territory a selection of Polynesian breadfruit varieties, and in exchange to import for testing in Polynesia a selection of Micronesian varieties of this important food plant.