UJNR PANEL ON TOXIC MICROORGANISMS

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INTRODUCTION

The UJNR (United States-Japan Cooperative Program on Natural Resources) was established in May, 1964, between Japan and the United States. The joint program of scientific and technical exchange on natural resources was a joint attack upon the environmental and resources problems that confronted both countries. As organized, each country had a coordinator, and areas of mutual interest between the two countries were established. Each area of interest was organized into a panel with a chairman and an alternate chairman on each side.

The original panels were:

1. Desalting
2. Air pollution
3. Water pollution
4. Energy
5. Forage seeds
6. Water evaporation
7. Toxic microorganisms

Initially, the Toxic Microorganism Panel had its emphasis on botulism with the title, Botulinum and other Toxic Microorganisms. At about this same time the fungal toxin, aflatoxin, was discovered; it and other fungal toxins shared equally with botulism.

In this paper Panel refers to the members of both the Japanese and United States Toxic Microorganisms Panels. In the beginning each side had seven members with C. R. Benjamin and Komei Miyaki as respective chairmen and Keishi Amano and C. W. Hesseltine as alternate chairmen. The Panel contained a mix of people who were experts on fungal mycotoxins and bacterial toxins.

Through the years the number of scientists has remained constant and with approximately an equal number of experts on bacterial and fungal toxins. The initial members of the Panel representing the United States, besides Benjamin and Hesseltine, were Keith Lewis, M. T. Bartram, John Graikoski, Carl Lamanna and Eugene Sporn. Representing the Japanese were the above named K. Miyaki and K. Amano along with K. Aibara, M. Kambayashi, H. Kurata, S. Matsuura, M. Nakano and S. Sakaguchi. Initially Sporn and Lamanna were consultants, and Matsuura was added at the first joint Panel meeting. Lamanna and Sporn had
been appointed as consultants because they were from the Defense Department, and there was some questions as to whether they could serve on the Panel as full members.

In establishing the membership of the panels, different departments were given the responsibility for organizing certain panels. The Panel on Toxic Microorganisms was assigned to Agriculture; hence Benjamin, who was research leader of the mycological investigations at Beltsville, was selected by the Department to be the chairman. He in turn selected Panel members with the approval of the appropriate department and the acceptance by the United States Coordinator, Dr. John C. Calhoun, from the Department of the Interior. The original Panel members came from the Departments of Agriculture, Interior, Defense, and Health, Education and Welfare as they had to come from government laboratories.

After establishment of the panels, the first U.S. meeting progress report on the UJNR was held on January 30, 1965. At this time each U.S. chairman prepared a report of his panel's progress. There were informal meetings on September 18, October 19 and January 9 preceding the January 30 report for the purpose of allowing the United States chairmen to discuss ways of cooperating with the Japanese chairmen. In his report of January 12, 1965, Benjamin stated that no U.S. Panel meeting had been held but that one was planned in February. He had been in contact with Dr. K. Miyaki, the Japanese Chairman in December, 1964 and at that time they had agreed that Panel activities should be focused upon botulism and mycotoxins, especially mycotoxins in rice and the aflatoxins. They agreed there should be an exchange of research papers on these two subjects.

The first concrete accomplishment was the supplying to the Japanese of a 300-page proceedings of a symposium on botulism and a list of current research projects in the United States on both types of toxins. In exchange, the Japanese Panel, with considerable effort, prepared and translated into English, "References on Botulism in Japan," in June, 1965. This contained the titles and short abstracts of some 90 Japanese papers. A similar bibliography consisting of 260 Japanese references on toxins produced by fungi was also supplied.

In the earliest report, Benjamin suggested areas of cooperation because no guidelines existed. Besides literature exchanges, he suggested an exchange of scientists, visits of panel members to each other's country, joint conferences and symposia. Later the members of the Panel decided there should be a statement of the Panel's activities and the microorganisms to be considered. This was put into a formal charter which reads as follows:

"The activities of the Toxic Micro-Organisms Panel are concerned with the pathogenic microorganisms and their toxins that contaminate foods and feeds. This contamination is a threat to the public health and causes unacceptable economic losses. The scope of Panel activites includes all aspects of these microorganisms--their distribution, the conditions of toxin production, their chemical characteristics, and the methods of control and prevention. Types of microorganisms specifically encompassed by this panel are toxic fungi, Clostridium, Staphylococcus, and Vibrio parahaemolyticus. This selection does not preclude future consideration of other microbial agents that produce food-borne diseases."

Joint Panel Meetings

The first joint meeting of the Panel was in June, 1966 in Tokyo with 4 American and all 6 of the Japanese members attending. The Japanese members came from the Ministry of Health and Welfare (3) and the Ministry of