

Supply—Fisheries

One other very important thing in research is international co-operation in this field. It is such a big field that it would be very foolish for every one of the fisheries nations of the world to be running their own independent show. That is why there is, happily, a very free exchange of work, of reports of scientific studies under way in the laboratories in the other great fishing nations of the world, Britain, France, Denmark, Norway and Japan, to mention some of them.

That is another reason why we must publish, in very limited form, of course, the current work of our scientists, so that scientists in other lands will know what we are doing. We send it to them and they send us their current proceedings, so we avoid duplicating their work. It is a real measure of economy, avoiding waste by duplication of effort just through limited publication of our current investigations.

Hon. members know why I am mentioning all this. Earlier this session the hon. member for Notre Dame de Grace—I am sorry he is not in his seat at the moment—and the hon. member for Moose Jaw, who I hope is in his seat—he is out temporarily—drew attention to some of the publications issued by our research board. The hon. member for Notre Dame de Grace went through a long list of scientific publications published over the last thirty years by our fisheries research board to draw attention to a few titles which he thought were indicative of scandalous waste of energy and money. I find this very difficult to understand, because in his speech on the budget two or three days ago he dealt for some time on the sort of concessions he wants the government to make for research in manufacturing lines. Both these hon. members could very easily have telephoned our research board, when they saw these titles which excited their curiosity, and found out why those publications were made. That was too easy, and of course they would not have got the publicity they wanted if they had done that.

I cannot describe the work of our research board better than by taking the list of publications the hon. member for Notre Dame de Grace put on record in *Hansard* to show the type of work we are doing and why we are doing it. The first two publications he singled out were on the technical side. I suppose it was the titles that interested him. I said that organic chemistry is a very difficult thing. The title of the first one is: "The Effect of pH on the Enzymatic Reduction of Trimethylamine oxide". It consists of one page. The second one is: "Bacteriostatic Action of Hydroxylamine". In our labs in Halifax we

are continually trying to find some wash which will kill bacteria or, if not kill the bacteria, retard the bacterial growth which immediately starts in any organism the minute it has died. We have done a great deal of work in that field for the fishing industry. One of the things that has been successfully developed is a very mild wash used on the lobster before canning which keeps the lobster meat from discolouring in the can. This is a very important development as far as the trade is concerned. The two studies mentioned are in this class. These studies were the effect of slight acidity in a chemical which was commonly used for this purpose. They are very technical. But the industry understands them and why they were done. The cost of each one when published, just to show how expensive they are, was five cents. One was published in 1945 at the Pacific research station and one in 1949 at the Atlantic station. Circulation is limited to the scientific institutions who give us documents and to our universities, and there is a small number left over for independent scientists. Thirty-two of the first one are left, and at five cents a copy that amounts to \$1.60. Twenty copies of the second are left, and at five cents a copy that amounts to \$2 or a total of \$3.60.

No matter what the hon. member for Notre Dame de Grace thinks the important thing is that the fish filleting industry in the maritime provinces thinks this work is important. They are the people who urge me to have more and more money spent on this very valuable type of technical research.

Of course, the next one is much better, "The Moon, and when to eat Mussels". Obviously this is silly to the hon. member. Well, mussels are a very important shellfish. In Europe there is a great market for mussels. Here we are so rich in shellfish that there is not so much of a market for mussels. But many people do eat mussels.

An hon. Member: Hear, hear.

Mr. Sinclair: I hear, "hear, hear" from New Brunswick. There was however a myth about mussels, that there is a time in the month when they are poisonous. We told one of our scientists to turn out this little short paper on mussels. If the hon. member for Notre Dame de Grace had read it he would have understood why it was published. Mussels spawn at full moon. Therefore the time to eat them is a week or so before a full moon, not when they are spawning, and certainly not a week after they have spawned, at which time they are spent. It also points out that mussels are only toxic when they are in a toxic area. These all