

Mr. ROXBURGH: You have talked about decrease in reproductive success. I wonder whether there has been any definite experiment carried on along this line through animals, and shall we say particularly our monkey friends as they are closest to the human race? If so, what are the results?

Mr. BROWN: You are not meaning birds, you know all about that. You are really referring to mammals?

Mr. ROXBURGH: Yes.

Mr. BROWN: It has only been done so far on rats because of course to do it you must have fairly rapidly breeding populations, and the cost of rhesus monkeys is almost prohibitive. With rats a significant decrease in the number of surviving young has been observed when the dietary level of D.D.T. reaches 50 parts per million. This is an extremely high dietary level. It is 100 times that in foods. In our experience of comparing large animals to smaller ones, so far it has turned out that large ones are far less susceptible than smaller ones. One would definitely say—in default, shall we say, of reproductive data from insecticide formulators, which I suppose could be obtained finally in sufficient quantities—that from what we know now we are reproducing at a sufficient rate anyway.

Mr. WILLOUGHBY: Mr. Chairman, it seems from what Professor Brown has said that he confirms the impression we have already had in this committee that we should think of a central agency to try to undertake these studies instead of having it spread among different departments—and that is no reflection on the departments undertaking it. Certainly the economic problem itself would indicate that we should have these agencies under one head. There is also the question of public education. How would Professor Brown suggest that we undertake to try and get over to the public the fact that these are not completely dangerous and yet we know they have to have some protective advice?

Mr. BROWN: Mr. Chairman, if that is a question which Mr. Willoughby asks me, what I imagine is the first thing to do is to give certain of the most important insecticides personalities. In other words, you should know roughly what the hazards are of each, and what they will do, and how valuable they are. You would introduce the public not to “insecticides”, which often in some cases have almost become a dirty word, but you would introduce them to D.D.T., you would introduce them to parathion, you would introduce them to arsenicals which are fortunately disappearing, and you would introduce them to a range of compounds, so that somehow not only the general public but also the user could get some idea of what kind of chemical he is using, why he has to use it, what contribution to the community he is making by using it, and what hazards to the community he is entailing by using it.

Mr. ENNS: This brings me to the point that was at the back of my mind on the question of research. In the previous hearings we have had a great deal of deploring of the lack of research facilities in this area. Many of the witnesses who have appeared before the committee have almost accused the government of not supplying sufficient funds and of the public not being knowledgeable enough to realize that this is so important. You are very optimistic and reassuring, and I am comforted by hearing you. However, would you support this plea for additional research facilities?

Mr. BROWN: Yes, of course, and indeed we should put Canadian research into the context of North American research, because for instance in wildlife so many of our species are migratory.

Mr. ENNS: Are you suggesting that this is not a companionable research, one country against the other?

Mr. BROWN: No, I was not implying anything of that nature, but certainly whatever is done in Canada has a great bearing on the United States, and