

Dr. BUCKLEY. I don't think he should. As an individual.

Mr. VIVIAN. What, then, will cause the chemical industry to produce chemicals which the farmer probably won't buy?

Dr. BUCKLEY. The regulatory pattern that we use with insecticides and pesticides in general is that they must be approved by the Department of Agriculture on the basis of their effectiveness and, second, on the basis of lack of adverse effect within their approved use.

If there is a whole series of compounds available for a particular use, then we turn next to the recommending procedures. Again the Department of Agriculture has a fairly elaborate system through the State experiment stations, and so forth, for making recommendations. It seems to me that you have a whole series of pressures that urge the farmer to use the safest compound.

If at the same time, he is given a tool which is as effective as the one he formerly used, I think you have some hope in moving in this direction. I don't see this as an open and shut situation with the present regulatory systems.

Mr. VIVIAN. But we will all agree that there is too much DDT in the world's "circulatory" system.

Dr. BUCKLEY. We certainly know that it is very widespread.

What we really don't know is how much of a disadvantage it really is in those places where it is present.

Mr. VIVIAN. Is it increasing?

Dr. BUCKLEY. In the United States its use is decreasing.

In the world as a whole, its use is increasing.

Mr. VIVIAN. And there is evidence it will last for many, many years, is that right?

Dr. BUCKLEY. Yes.

Mr. VIVIAN. So even if we continue the same rate of usage, the total will undoubtedly increase throughout the world.

Dr. BUCKLEY. Yes; although if you take again the human being in the United States (this relates to that matter of change, again), if you go back to the early 1950's, I think the evidence is that there is no increase in the quantity of DDT and metabolates present in the human population of the United States.

The sample numbers are very small, but there is nothing there to suggest a very marked increase and in fact they suggest a leveling off.

Recent intake may have been somewhat lower than before. I'm not sure but what we have reached some static point with excretion balancing intake, and with this point hopefully below a point of biological damage.

Mr. VIVIAN. Have we developed anything that might be called a sweep-up chemical? In other words, if you have an excess of acid in a stream, you dump in some base to react with it and in some respect change the chemical structure. Do we have chemicals which can reduce the DDT present?

Dr. BUCKLEY. To my knowledge we do not. We did face a problem with benzenehexachloride a number of years ago when it was used on potato fields and it made potatoes taste musty. People did at that time try putting activated carbon on the fields and they were able to reduce uptake by potatoes.