

The CHAIRMAN: Thank you very much Dr. Coon.

Mr. OTTO: Dr. Coon, I wonder whether you could tell this committee if you know what percentage of professional users of pesticides, and I am speaking of farmers and foresters, as well as others, overuse pesticides? Do you know that percentage from facts or figures in your possession? We would normally expect professional people to use these pesticides as directed, but humans being what they are, there will be some overuse.

Mr. COON: I cannot answer that question with any specific figure or even estimate. Certainly there is some overuse. In California, especially, I believe there are reports indicating a larger number of cases of poisoning which are referable to operational use of pesticides. Have I touched upon the principle to which you have referred?

Mr. OTTO: Yes.

Mr. COON: You are referring to the poisoning of workers rather than the residues in excess of the tolerance levels, is that right?

Mr. OTTO: I am thinking of residues in agricultural produce which an individual is attempting to protect. Some human beings like liquor and feel that since a little bit is good, a little more is better. What percentage of farmers, for example, would take a similar attitude in respect of the use of pesticides regardless of the training they have received? Can you tell us the percentage of pesticides overused, especially of the persistent type?

Mr. COON: I have the impression that there is very little of this happening. I arrive at this conclusion as a result of the fact that there is very little found in the form of residues which is in excess of established tolerances. There are reports in this respect from the south, and this situation was commented upon in the president's science advisory committee report on pesticides. It stated that three per cent of the fruits and vegetables picked up in markets—and I believe this referred to such produce which had not been shipped in interstate commerce—did have residues in excess of the tolerance levels, though not far in excess.

Mr. OTTO: Dr. Coon, I have been recently reading about a breakthrough in the persistent detergent fields which have been creating a problem in the past. I understand there is now being produced a detergent which is not persistent. This is done by some chemical process. Do you know of any investigation in this field, or whether that principle whatever it is, can be applied to the persistent pesticide problem? Are you aware of this new breakthrough in the detergent field?

Mr. COON: I have seen something of this in the newspapers. I have probably read less about this than you have read, but I have been aware of it, yes. I am not familiar with the basic chemistry involved, nor do I know whether it can be applied to the problem you have raised in respect of pesticides. Personally, if we continue to use chemical pesticides any progress that can be made might very well be in the direction of locating chemical agents which will poison insects but will be much less toxic to animals, including man. Of course, some progress along this line already has been made. A number of the organophosphate insecticides have relatively low toxicity in animals compared with insects.

Mr. OTTO: Has anyone explained to the committee very basically and in such a way that we can all understand what makes a pesticide persistent? What is the chemical breakdown that makes a pesticide persistent?

Mr. Chairman, do you know if this has ever been explained to the committee?

The CHAIRMAN: Not to my knowledge, Mr. Otto.