

industry millions and millions of dollars. The development of sex attractants so the insects move to this odor and, while moving to it, they go through a device that electrocutes them is another example of alternate means of control. There are many alternate ways that are being developed.

Then we must develop—and we are working on this—pesticides that are nonpersistent and ones that are more specific to the insect that one wishes to control.

Mr. DADDARIO. That creates a problem right away in the market.

Dr. WADLEIGH. Yes. After all, I am sure that agriculture suffers seriously from these nonspecific pesticides. Think of the billions of honey bees that have been killed, insects that pollinate our plants. Think of the billions of beneficial insects that have been killed by these pesticides.

In California in the citrus industry, predators control quite a number of insects, but a nonspecific pesticide also kills the predator.

Mr. DADDARIO. It is too bad we did not think this way when we were first beginning to work on these control measures.

Dr. WADLEIGH. Hindsight is so much better than foresight.

Mr. DADDARIO. I think it does enhance our vision. The discussion we had in the earlier part of the day revolved on the fact that we should have professional people competent not only to develop the work but to take the great responsibility of calling attention to the ill side effects as well as the positive gains. This is not necessarily a hindsight situation. We need to develop a forecast capability so we might be able to make assessments of those programs that are important to us, to see if they will, in fact, do everything they are touted to do, and to come to some better judgment in the future. I do not think we have too much room to move around in. Lessons we can learn from the past ought to be assessed in a complete way, not that it will just kill off insect A, but how it affects our whole environment.

Dr. WADLEIGH. That is very true.

Mr. DADDARIO. I say that only because I think, Dr. Wadleigh, we have a tendency to use the umbrella of hindsight. Actually, it is an easy way to get out of our inability from the research, science, and technology point of view to make an assessment is part of the research job. The job of looking ahead and not looking back.

Dr. WADLEIGH. You are so right.

Mr. GRANT. I think the maximum effort to do this is certainly incumbent upon anyone who is working in this field. I know we recognize this responsibility, and it weighs heavily upon us.

However, as you have pointed out, this has not always been the case. Many assessments have not been completely accurate as to future implications.

Mr. DADDARIO. In this committee we have a bill on technology assessment. I wish we could develop a national characteristic that would be part of our research effort to look at things in the whole way.

You spelled out a very interesting and frightening proposition, Dr. Wadleigh. The fact is, it does not make much sense to kill off everything to get at one. I recognize there are great economic problems, some of which you have already on, which show how it is false economy to approach it that way. The long way around and the more expensive way in the final analysis might be cheaper.