HOW CAN THE INSECTICIDE INDUSTRY ASSIST IN MOSQUITO CONTROL?

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I hope my remarks on this subject will reflect the vital interest that our industry has in your problems and your programs. We want to help solve the problems and promote your programs in every way that we can.

The most obvious way that we can assist is by providing insecticides that are safe, effective and economical. I think you will agree that we are providing you with such insecticides today in spite of the resistance factor.

An insight into how economical insecticides have become is given by some figures I have here. They come from an analysis our industry did on the monies expended by various mosquito abatement districts. These figures tell us that in no instance did the purchase of insecticides account for as much as 10 percent of the total funds spent by the district reporting and, as a matter of fact, in many instances the purchase of insecticides accounted for less than 5 percent of total funds expended!

A second way our industry can assist you is in its continuing research projects. Even though we supply you today with effective and economical insecticides our scientists still search for products that will do an even more effective and more economical job of insect control, and will, we hope, continue to cope with resistant forms.

It may appear to some of you that our research efforts are directed almost exclusively to agricultural problems. Certainly, it is true that the greatest amount of our research work lies in this area. And for good reason. To our industry the mosquito problem in this country appears small when compared to the problems created by pests plaguing the farmer and his crops. Today, malaria has been all but wiped out of our country. This fact is a tribute to the fine work that you people have done. It also shows that you have had the insecticidal weapons with which to do your job. So, from the standpoint of comparative need alone, it is obvious why the brunt of our research effort is directed toward agricultural problems.

In the view of an outsider, it appears that our industry has been able to assist your work most successfully where community effort has been organized toward the elimination of disease-bearing and pest mosquitoes. This kind of effort is usually backed by all or most of the funds which would otherwise be spent by individuals in the community to kill mosquitoes. I think you will all agree that when such funds are pooled on a community or locality basis, you are able to bring about more effective control. The problem then seems to be: how to bring

about such community-wide effort in more communities.

I am not proposing that private industry take the lead in organizing such efforts. I do not think it is properly our domain. Our role should only be one of cooperation.

It is our belief that inspiration for the organization of abatement districts (usually arising locally from service clubs) should continue to be encouraged by state authorities and that technical and financial assistance should be given where major problems exist. In this connection, I believe that the companies in our industry would gladly give their fullest support to such programs.

The foreign aid health program, although different in scope, will give you an example of the course that our industry's cooperation could take. In effect, we have helped tailor-make an insecticidal program to a given country. At the start of such a program, specialists were sent into remote areas of the world to study the requirements of the particular locality. Coordinating meetings with representatives of our industry were held by authorities of the World Health Organization, the Pan-American Sanitary Bureau, the U. S. Department of Agriculture, the U. S. Public Health Service and members of the Armed Services. Then special formulations of insecticides were developed . . . special packaging was designed . . . concentrated formulations prepared. Double air-grinding was found necessary in some cases, and specialized blends of surface active agents were worked out to give the desired performance in waters with high alkalinity, in spite of extended storage under tropical conditions.

The packaging problem alone was quite a task. The insecticide had to travel on almost every conceivable type of transportation from ship and airplane to camel and mule trains and be subjected to the most rigorous type of handling and storage.

Not all important problems relating to mosquito control have been solved. Aside

from the development of resistance, one of the most important which has come to light during the past few years has been the deactivation of insecticidal residues on certain sorptive mud surfaces.

Our industry has already invested heavily in research to solve this problem. When we have solved this problem we believe that we will have advanced pest control technology in agriculture, in live-stock pest control, as well as in the eradication of malaria, filariasis and other diseases.

We further believe that the many contributions that have been made by our industry to the technology of pest control and specifically to the control of disease vectors is generally recognized and apparent to those investigators working in the field of mosquito control in this country. Many of your own members have served one or more tours of duty working in remote areas and they are most assuredly in a position to apply the benefits of such experience to the advantage of our domestic pest elimination problems. It is possible that there could be better dissemination of such knowledge to those engaged in mosquito abatement in this country. However, it is my firm belief that the chief need of mosquito control effort in the United States is not so much one of technology as it is a need for education, organization and appropriation.

Organization-wise, perhaps mosquito control will have to be affiliated with other forms of pest abatement, particularly in those areas where the mosquito problem is not acute nor constant. Where there are other problems such as tabanids, eye gnats, midges, or even unrelated communitywide pest problems such as weeds, grasshoppers, gypsy moths, control might best be carried out on a community-wide basis by organized effort. In such communities I feel our industry can make a more worthwhile contribution to your cause where community-wide pest control, such as the control of disease vectors and nuisance pests, is coordinated in a single community-wide program. Under such a program you could not only gain more efficient control of mosquitoes, but perhaps for very little additional funds, could also gain control over agricultural and other pests common to the area, by using the same equipment, the same personnel, the same administration—in some instances the same insecticide and the same application. I suggest such a program as a possible solution only for those communities where mosquitoes are not sufficiently troublesome to require an orthodox mosquito abatement district.

Two strong selling points for such a program are added efficiency and added economy. Companies in our industry could help bring about these benefits by developing ways to supply multiple purpose formulations which would simultaneously strike at noxious weeds, grasshoppers and mosquitoes in a single application.

There are in almost every area many representatives of our industry who are highly trained in the science of insect eradication or control. Most of these men could help plan such a community-wide program. The insecticide industry can also supply you with literature to help educate residents of a community to the need for organized pest control. We can also make films available to you to help supplement such an educational campaign. Two such films are Sinclair Oil Com-

pany's "Five-Hundred-Thousand to One" and a film produced by my own organization titled "The Rival World." I think you will find that both films are excellent examples of education by drama.

Looking back over the points that I have tried to make this morning, it appears that the insecticide industry can help you both in your job of controlling mosquitoes and other insects and in your job of selling your community on the need for such control. In the first instance, our assistance shows up in our role as a supplier of materials for insect control . . . and in our research efforts the aim of which is to supply you with more effective and cheaper insecticides.

The organization of control programs is rightly the responsibility of you people and other residents of your individual communities. Representatives of our industry who are members of a given community can help you plan the most effective type of control, and I'm sure you will find that the majority of them will be glad to do so. And our industry, as a unit, can assist you in your job of educating a community to the need for control.

This is the assistance our industry can offer. To it I will add my personal compliments for the health and life-saving job you have done by your work in controlling mosquitoes in this country . . . and my best wishes for continuing success.

DESPLAINES VALLEY MOSQUITO ABATEMENT DISTRICT

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Member of American Mosquito Control Association

Trustees

Otto McFeely, President; Charles F. Scheel, Vice-President; John J. Callahan, Secretary; Francis P. Creadon, Treasurer; William E. Goersmeyer, Ass't Secretary.

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The District was created under state law adopted in 1927 by the General Assembly of Illinois. The District has functioned for twenty-nine years.