

## Safety and the Pesticides Industry's Future

WE BELIEVE FIRMLY that the increase in application of science to agriculture during the next 10 years will be more extensive and effective since there has been a conscious chemicalization of agriculture. Upon the care and soundness with which this "revolution" is effective, will depend the success of the technical industries serving agriculture. This applies with special emphasis where the chemical industry is involved.

There is serious concern over the shortage of trained scientists including both chemical and agricultural. There is also much concern over the misunderstanding between the scientist and the public. Perhaps these two are not totally disconnected. Both deserve some consideration with respect to agriculture.

A few generations ago the public was inclined to look upon the chemist as a creature apart from society. In the lay picture, he pattered about a smelly, fuming laboratory almost constantly squinting into a test tube held up to a beam of light from a cracked, dirty window. He was the personification of a fascinating quasi-evil from an unknown and mysterious world. He was a dependable prop for a horror story. And the public tingled at meeting, in the imagination, this brother of Beelzebub.

But within a period which amounted to little more than overnight in the molding of public concepts, we were wearing on our bodies, putting into our stomachs, and living amongst the products of the chemist. The wonder fabrics, miracle drugs, and the fabulous vitamins made the public hunger to know more about these things it beheld with fascination.

Naturally, the chemist was brought into the public eye. He was expected to tell the public about these wonders and explain how they worked. But he had trained long and hard in a specialized profession that had been unaccustomed to meeting the public. In fact, his pride in his profession had been injured by the picture painted a generation or two before—the laymen held their noses or expected an explosion at the mention of a chemist. This encouraged many chemists to avoid publicity which, experience had shown, often led to embarrassment. Now in the limelight before an audience eager to bestow adulation, often he was speechless and conditioned against the situation. Public opinion demanded an answer. Part of it took one that was ready—Beelzebub's brother.

Today, the chemical industry and profession have a great deal of prestige. The public is becoming more accustomed to what it recognizes as chemistry and more people have chemists and chemical engineers among their personal acquaintances. But there still remains too much of the old inference about chemists and chemicals. Such matters aren't remedied overnight. The remedies are accomplished step-wise. One example of a successful step has been the establishment of the AMERICAN CHEMICAL SOCIETY News Service, which has strengthened and improved relationships between scientists of the chemical profession and the nation's newspapers, radio, and televi-

sion. By this means chemists and chemical engineers have been able to present their work to the public more satisfactorily.

Information presented to the public is extremely important to the agricultural chemicals industry. A disturbing percentage of the articles appearing in magazines for general readership have taken the negative view of the use of pesticidal chemicals. Some of these have appeared in publications reaching groups particularly influential on public opinion and action. There are some remarkable and glamorous stories that, without exaggeration or sensationalism, can be told on the favorable side. But relatively few are reaching the general public.

This is particularly pertinent in the matter of public safety education about agricultural chemicals. A safety program commendably was urged by California Spray-Chemical's president, A. W. Mohr, at last month's meeting of the National Agricultural Chemicals Association. He suggested a two-part program: one part for industry and one part for the NAC Association. The cost may be high, but what expenditure could be more basic?

Once the public is educated properly about the facts on the hazards of pesticides and proper precautions, the dangers will be recognized but will cease to be the characteristic uppermost in the mind. We are properly respectful of the hazards of handling household lye, shotgun shells, or electrical equipment, but no one suggests that they are evils being foisted upon the public in disregard of our welfare. Education that will bring the general public to realize that pesticidal chemicals are useful materials which need only be handled with recommended care is needed to overcome the lack of understanding which can hinder the development of those products. Retarding the useful application of chemicals to agriculture not only would constitute an economic loss, but also would jeopardize the future supply of foodstuffs. Furthermore, if the chemists, and more broadly all scientists, suffer loss of prestige through such public reaction, the field will fail to attract the best possible men and the loss to agriculture and the industry will be even more serious.

Pesticidal chemicals are in a particularly good position to get their public status on a common sense basis through the great increase in nontechnical consumers using those products at home. But, the opportunity must be seized as soon as possible and developed with sensitive care, else the trend of opinion may go in the wrong direction. An intelligent and thoughtful program in safety education for both industry and the public deserves the vigorous support of the agricultural chemicals industry.

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