

# LETTERS

## More Comments on "Silent Spring"

DEAR SIR:

In the course of reading a *New York Times* book review (favorable) of Rachel Carson's "Silent Spring" this evening, I realized a very unfortunate implication in the letter (unfavorable) by Dr. Sperling and Dr. Geiling which appeared in the Sept. 24 issue of C&EN. In discussing the ability of "all living things," including people, to adapt "not necessarily over eons of time or generations of progeny" to possibly harmful chemicals, the professors note that, "In fact, the resistance of insects to pesticides is an excellent illustration of such adaptation." Of course, we all realize that insects do make the adaptation with sometimes dismaying ease. This, in fact, leads to the survival of the species at cost of a large majority of the individuals over a few generations. Somehow, I cannot bring myself to willingly involve my own progeny in this form of adaptation! Further, has Miss Carson actually advocated complete abandonment of the use of herbicides and insecticides? Or was it just abandonment of such practices as aerial spraying and the indiscriminate use of substances which could bear a rather horrible resemblance to thalidomide?

ROBERT S. MERKEL  
Charlottesville, Va.

DEAR SIR:

Dr. Darby's review of Rachel Carson's book, "Silent Spring" (C&EN, Oct. 1, page 60), is a good one. A review of this type is generally not brought to the attention of the Book-of-the-Month Club patrons. This is illustrated in a report about what reviewers are saying, as given in an ad which appeared in the Oct. 9 issue of the *New York Times*. Virtually all of the reviews expect this book to produce a noisy autumn since most of the reviewers tend to side with her point of view.

The most proper criticism must be leveled at Miss Carson's technique. It is reminiscent of the radio program of Oct. 30, 1938, in which Orson Welles described an invasion from Mars. Her failure to present the overwhelming truth of the other side of the story—the success and proper regulation of pesticides—is quite deplorable.

If the major effect is to make people

aware of the potential hazards of private use of economic poisons which are used without heed to label directions, then the book will have been worthwhile. If this happens, then Miss Carson will have achieved what manufacturers, national safety councils, public health officials, and poison control centers have been unable to do—shake the smugness and complacency out of individuals in their daily use of any type of spray, medicine, pesticide, disinfectant, etc.

Logically, the best defense that the Food and Drug Administration and Department of Agriculture officials can use against her is that they will keep up their excellent offense in the registration and regulation of pesticides, food additives, and drugs in general. It is certainly hoped that they will not decide that they must defend their position.

Dr. Darby states that, "in view of her scientific qualifications in contrast to those of our distinguished scientific leaders and statesmen, this book should be ignored." His final statement is: "The responsible scientist should read this book to understand the ignorance of those writing on the subject and the educational task which lies ahead." We can't both ignore it and read it. The latter is the more proper approach. Everyone interested in this field should read it and properly understand her weighted choice of events.

... Dr. Darby says: "They [tolerances] include a very wide margin of safety, usually being set at 100 times the *minimal* amount of the substance which produces any physiologic effect . . ." This should read: ". . . one/one-hundredth . . ." Also, tolerances are not usually set at this level, but rather are not permitted to exceed this level.

CHARLES F. GORDON  
Philadelphia, Pa.

DEAR SIR:

Congratulations for printing Dr. W. J. Darby's review of "Silent Spring." I found it illuminating and stimulating. Through his review, the other exchanges in the pages of C&EN, and the Oct. 15 C&EN report of the interview with Mr. W. W. Dykstra, we will get at the true state of affairs.

It seems to me, however, that Dr.

Darby does not completely avoid using the same method of indictment he condemns in Rachel Carson. I may agree with him that she uses excessive emotional appeal and/or other questionable methods, but these will help generate necessary action in some areas that have not been wholly beyond reproach.

Similar methods have been sometimes necessary to get action in the whole area of air and water pollution in various parts of the country when otherwise, public and private groups responsible for pollution would have taken their own sweet time in trying to do anything.

Scientists are human beings first and scientists second. They, too, are endowed with strength and weakness, good and guile, devotion and deceit, sacrifice and selfishness, foresight and foolishness just as other human beings.

J. D. CLENDENIN  
Murrysville, Pa.

DEAR SIR:

Without in any way wishing to pass judgment on the merits or demerits of Miss Carson's thesis in her book, "Silent Spring," I feel some criticism is in order of the review of this book, published in the Oct. 1 issue of C&EN. Having been a precious metals chemist all my life, the subject under discussion is certainly not within my field, and I do not pretend to have a valid basis for forming a judgment. The title (presumably the editor's contribution) and the tone of the review make me wonder if we chemists are not trying to hide something here. Both the title and the review portray an attitude ill becoming a scientist. Following so soon our disastrous failure in the thalidomide episode in Europe, a little humility on the part of chemists is in order.

Says Dr. Darby: "She fails to recognize that 'the consumer' includes the producer, farmer, wholesaler, retailer, equipment manufacturer, their families, and even the scientists who evaluate the chemicals." The same could have been said about the consumers of thalidomide, and yet this did not prevent the birth of approximately 5000 deformed children. We must be naive indeed, and unrealistic, to believe that because scientists are consumers, they will exercise due care in recommending the use of poisons.

Similar abuse was heaped on the late Harvey W. Wiley for his efforts

on behalf of pure food. Sixty years later, we should know better. What is needed in the present case from the scientific community is not abuse and name-calling, but a sober unemotional presentation of facts. If Miss Carson is wrong, the way to convince the public is to show what the industry, the universities, the research institutes, and the Food and Drug Administration have done and are doing with this problem. Such presentation must emphasize consideration of the total problem, including long-range effects on the environment, on wild life, and on man himself.

FRANK A. MEIER  
Newark, N.J.

DEAR SIR:

"Silence, Miss Carson" is perhaps the most irresponsible review that I have ever seen in C&EN. That the editors have accepted it for publication is a blemish on their sense of perspective.

There are a number of valid objections to Miss Carson's latest book. Intemperate remarks, however, are no substitute for reasoned arguments. Even the slightest acknowledgment that an issue does exist is nowhere to be found in the review. The undeniable fact will remain that little, if anything, will be done about it until an aroused public opinion demands it. Witness, for example, the recent action by the Congress following the thalidomide tragedy.

May I urge the C&EN editors to consider publishing a more balanced appraisal of this admittedly controversial book.

ELIE A. SHNEOUR

Palo Alto, Calif.

DEAR SIR:

The review of "Silent Spring" by Dr. Darby was, I fear, an extremely bad-tempered one. Your headline, "Silence, Miss Carson," was even worse.

A cool view of Miss Carson's book reveals that she has correctly criticized the misuse of insecticides, and not the use of any chemical methods. "Approved agricultural practice" has not been followed, in a disgracefully large number of cases. And the "approved practice" has turned out to be actually quite hazardous in a number of cases, particularly where synergistic effects were not recognized in time. Adequate testing would have delayed the introduction of many chemicals; but

adequate testing would also have prevented the mass tragedy caused by thalidomide.

Also, insecticides by and large are not adequately labeled.

Dr. Darby's only favorable comment on "Silent Spring" is that it may inspire "... some users to read and heed labels more carefully..." I personally know a large number of chemists (Ph.D.'s included) who have used DDT, dieldrin, and other insecticides with gay abandon for years. When I looked for warning labels on boxes or cans of insecticides on the supermarket shelves, the only clear warnings were against overheating the aerosol cans! And I myself have long been in ignorance (despite a Ph.D. and 20 years of experience as a chemist, and as a regular reader of C&EN) of the actual hazards of dieldrin, etc.—though I knew a little about DDT hazards.

Dr. Darby devoted only 3<sup>1</sup>/<sub>2</sub> inches to malaria control, his only example of the positive benefits of insecticides—and that in nearly two full pages of "negative thinking." The ratio of space use should have been inverted to make a fair presentation of the chemists' positive case. Great benefits have resulted from proper use of insecticides, not just in the case of malaria, but yellow fever, typhus, bubonic plague, etc.; and in the prevention of near total destruction of crops by grasshoppers, potato beetles, boll weevils, corn borers, etc.; not to mention the protection of stored grain by fumigation, or the protection of wooden structures from termites. An example of a worth-while positive article on this subject has just appeared under the title "The Desolate Year," in the *Monsanto Magazine* for October 1962.

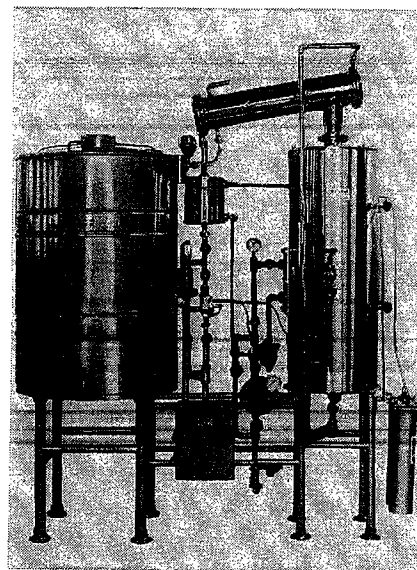
But instead of this positive type of response to Miss Carson, C&EN and Dr. Darby have reacted like a cigarette company executive when somebody asks if smoking causes lung cancer.

I believe we should recommend Rachel Carson's book as required reading for every chemistry major, say in the junior or senior year, or just after taking organic chemistry. Very few chemists learn anything as undergraduates about the toxicity of chemicals—beyond the examples of HCN and H<sub>2</sub>S, that is. But let's not react hysterically, as if we wanted to suppress or even burn the book!

ROBERT J. GOOD

San Diego, Calif.

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