



J. B. KENDRICK, JR.

Vice President - Agriculture
and University Services

Research, politics, and the public good

During most of the first 100 years of research in publicly supported agricultural institutions, what was done and how it was to be carried out resulted largely from a dialogue between the researcher and the first user of the new information and developments. After World War II, during the 1950s and 1960s, research programs became largely a negotiated agreement between the scientists and federal or private granting agencies.

In the early 1960s, following publication of Rachel Carson's *Silent Spring*, a third party entered the dialogue—the public-at-large and its elected representatives. Life for the researcher has not been the same since. Nuclear reactor breakdowns, thalidomide-caused deformities, pesticide-induced illnesses, chemically contaminated environments, and a score of other adversities, however well explained and corrected, have created an atmosphere of skepticism about uncontrolled publicly supported research. It is not surprising, therefore, that the public seeks greater involvement in determining the research agenda. Agricultural science has not escaped this lack of confidence and is increasingly called upon to demonstrate conclusively that its activities will truly result in a public good.

As groups organize around special issues, they become valuable sources of tangible support for elected political representatives. Thus, another ingredient has become prominent in the process of determining our research agenda. Not only are topics judged on the merits of scientific worthiness, agency goals, funding availability, and user needs, but now their political popularity with less directly involved public groups plays a decisive role in setting priorities.

The change has not been abrupt, but the cumulative effect is cause for concern in the scientific community. For most scientists, it is not easy to deal with because of the inherent difficulty of communicating across the barriers of scientific and lay language. Where suspicion exists, it is only heightened by lack of understanding. Furthermore, public concern is often perceived as interference with the scientist's right to seek the truth.

One serious consequence of political judgments prevailing over scientific evaluations is diminished public support of basic or untargeted research. Political sights are usually trained on short-term payoffs. Although politically desirable, these endeavors often are scientifically unsound, and the benefits transient.

Another consequence is that some sound economic gains

for society as a whole are placed in jeopardy. This was illustrated vividly in the attempt to eradicate the Mediterranean fruit fly in the California urban counties of Santa Clara, San Mateo, and southern Alameda, using an inadequate procedure advocated by political representatives responding to the concerns of a poorly informed public, and against the recommendations of a technical advisory committee.

Political support of unsubstantiated claims, contrary to the best available scientific evidence, produces adverse consequences for the scientific community, because it increases the distrust of laypersons about science and technological developments.

Although I seem to be drawing a sharp line of distinction between the scientific community and the public with its elected representatives, I hasten to acknowledge that the researcher's house is not totally in order. Sometimes members of the scientific community exploit public anxiety by hasty and speculative reporting for personal reasons. This is as much to be condemned as are questionable actions by those seeking to enhance their political following.

Within the scientific community, challenge of scientifically developed facts is a well-recognized procedure leading to the development of ultimate truths. That process is not well understood by the nonscientific public and is sometimes seen as evidence that science is in disarray and is not to be believed. Political exploitation of this established procedure can only result in a long-term loss to society's goal of a better life for everyone.

So what do we do about the collision course science and the public seem to be taking? First, our research community must recognize and accept the new environment in which we work and accord political representatives a role in setting the agendas for publicly supported research. Only by doing so will public confidence increase and the skepticism decrease. Second and equally important, elected representatives must recognize and accept a role as arbitrators and interpreters of views from their science advisors as well as their nonscience constituencies. They must seek to understand the nature of science and scientists just as thoroughly as they analyze data from public opinion polls. They must distinguish between exploitation and fact, and function as the public's jury.

I have faith in the process, but it must be fueled with goodwill on the part of both politicians and scientists. The public's long-term interest is at stake.