

10, 5, or zero percent; yet those less than 15 percent had a negligible effect on production. Farmers are skilled at inducing slippage.

Environmental considerations progressively pushed price and income goals aside, easing the one-time conflict, even as the linkage of deficiency and transition payments with Conservation Compliance constituted a felicitous connection that Wilson, Ezekiel, and Tolley dreamed of but lacked the political oomph even to propose.

Harold F. Breimyer  
University of Missouri, Columbia

### "Economics and Pesticide Regulation"

#### Moore & Villerejo comment

■ In their article in this issue, Lichtenberg et al. defend their use of subjective estimates (see "Kentucky Windage," *Choices*, Third Quarter 1996) to create a data base for economic analysis of pesticide regulation. Subjective data, they argue, is acceptable in scientific research because it reduces costs and allows for quick response time. We feel there is no place in scientific investigations where expediency and economy are more impor-

tant than accuracy. A model cannot be validated if the data base is only personal judgment.

Lichtenberg et al. miss our point concerning the impact of industry structure on the flexibility to adjust to pesticide cancellations. The California/Arizona lettuce industry is oligopolistic. A very few large grower/shippers own or contract lettuce production in all the climatic zones of the region. They are diversified over time, place, and commodity; thus, they can shift production within and among production areas based on comparative advantage, minimizing the impact of any technological constraints.

The third area is the impact of pesticides on the environment. First, they state that no information is available on target pests. All applications for restricted pesticide use permits in California require reporting the commodity, pesticide, and the target pest. Second, they claim that "pesticide poisonings of farmworkers are rare." Doctors first reports of pesticide illness in California for the six years prior to cancellation of parathion averaged over twenty-two cases per year. Rareness is in the eye of the beholder. If you are working in a lettuce field when the crop

duster comes over, you don't think in terms of "rare."

The statement, "partial information is clearly better than none" is also raised in defense. We would respond that partial information is valuable but only if it is accurate. In this case, we have demonstrated that it is not. What is the value of erroneous information?

The topic of EPA contracting only for analysis of impacts on food and fiber markets requires researchers to ignore the nonmarket impacts of the cancellation decision. This creates an ethics problem for the profession. Should we accept research funds knowing there are serious economic impacts to farm workers and the environment which we are not allowed to investigate? Is this a politicization of the academic research agenda?

In summary, our colleagues have attempted to justify use of an erroneous subjective data base, ignoring the original pesticide efficacy studies mandated by EPA which are a matter of public record. A wise person once said, "If you don't have time to do the job right the first time, when will you have time to correct it?"

Charles V. Moore and Don Villerejo  
California Institute for Rural Studies

---

### Findings Citations

Egan, L., and M. Watts, "Some Costs of Incomplete Property Rights with Regard to Federal Grazing Permits," LE, May 1988. Mullen, J., G. Norton, and D. Reaves, "Economic Analysis of Environmental Benefits of Integrated Pest Management," JAAE, December 1997. Kaiser, H., "Impact of National Generic Dairy Advertising on Dairy Markets, 1984-95," JAAE, December 1997. Martin, L., "Production Contracts, Risk Shifting, and Relative Performance Payments in the Pork Industry," JAAE, December 1997. Bosch, D., M. Zhu, and E. Kornegay, "Economic Returns from Reducing Poultry Litter Phosphorus with Microbial Phytase," JAAE, December 1997. Turner, B., and G. Perry, "Agriculture to Instream Water Transfers Under Uncertain Water Availability: A Case Study of the Deschutes River, Oregon," JARE, December 1977. Rosenberger, R., and R. Walsh, "Nonmarket Value of Western Valley Ranchland Using Contingent Valuation," JARE, December 1997. Tiller, K., P. Jakus, and W. Park, "Household Willingness to Pay for Dropoff Recycling," JARE, December 1997.

Note: LE is Land Economics, JAAE is the *Journal of Agricultural and Applied Economics*, JARE is the *Journal of Agricultural and Resource Economics*.