ENVIRONMENTAL REGULATION

BIOTECH'S EFFECTS ON BIODIVERSITY DEBATED

BRAUNSCHWEIG, F.R.G.—"Bureaucratic socialism has collapsed in Eastern Europe because those countries did not face the economic truth. In the same way, market economics is bound to collapse because it does not face the ecological truth." Ernst von Weizsacker, director of the Bonn-based Institute for European Environmental Policy, voiced this opinion here at a recent symposium jointly organized by the Braunschweig-based National Research Centre for Biotechnology and the European Environmental Research Organization (EERO, Wageningen, the Netherlands). Von Weizsacker, who also chairs the Association of German Scientists, was commenting on the need for a total change in perspective by the regulators of biotechnology.

"Within their own terms, the present controls in Europe—including the two directorates approved recently by the EEC [European Economic Community]—are quite satisfactory," he believes. "They are acceptable according to today's criteria. I would even say that, when compared to our lack of strong action on global warming, the EEC efforts amount to a rare example of international collaboration. But we should not be assessing developments in biotechnology solely by the likelihood that they will cause accidents. We need to stand back and see that it is the market mechanism itself, the basis of capitalism, that is causing the depletion of gene pools and losing precious biodiversity. The farmer who simply cannot afford *not* to use the latest strains of cereals or crop plants, for example, is caught up in a process that is impoverishing the planet by reducing biodiversity."

The chairman of EERO, Alexander Zehnder of Wageningen Agricultural University, challenged Von Weizsacker, claiming that biotechnology was actually adding to biodiversity. "Even in Holland, with our high-density population, farmers are now being paid to leave fields fallow," he said. "Agricultural productivity has improved so much through high-yielding varieties—and is being further enhanced by biotechnology—that vast amounts of land can now be released for other purposes and can even be left as wilderness." Supporting Zehnder was Willy Verstraete of the State University of Gent (Belgium), who argued that the regulation of biotechnology was already so stringent in many countries that it was working *against* the development of environmentally beneficial organisms and techniques. "Environmental protection would actually gain if constraints of this sort were removed," he said.

Von Weizsacker insisted that these were short-term arguments, that the global environment was deteriorating rapidly, that biodiversity *was* being lost throughout the world, and that true sustainability rested on measures such as raising our presently "ridiculously low" energy prices. "The regulation of biotechnology, like many other questions, should be dealt with only in terms of these global resources and our management of them. It is all clearly reflected in current concern about the so-called public understanding of biotechnology. Instead of worrying about teaching schoolchildren and taxi drivers about the wonders of science, we should be creating a continuous dialogue in which our credibility relates to how seriously we take the environment."

—Bernard Dixon

FEDERAL LEGISLATION

TOWARD UNIFIED RULES ON DELIBERATE RELEASE

WASHINGTON, D.C.—Congress is attempting to ravel the many loose regulatory ends associated with the deliberate release of genetically engineered organisms. Its new draft bill amends laws governing federal regulatory agencies and would set uniform practices for permitting deliberate release experiments over the next seven years.

The comprehensive legislation being drafted by the House Subcommittee on Investigations and Oversight of the Committee on Science, Space, and Technology, is known unofficially as the "Biotechnology Regulation and Research Integration Act." It likely will find sponsors from among the diverse group of Representatives and Senators who have been following biotechnology issues.

According to committee counsel Gregory Simon, the goal is to develop a "consensus bill" that is acceptable to U.S. biotechnology companies, academic researchers, and environmentalists, all of whom were consulted during the bill's drafting. Simon points out that the best legislative model in the U.S. for such consensus development is the North Carolina bill that established a Genetic Engineering Review Board within the state's agriculture department (*Bio/Technology* **7**:1002, Oct. '89).

The draft law mandates two different permits for deliberate release proposals—one for research and development and the other for commercial use, Simon says. At the R&D level, information "would be submitted, as now is done on a more or less voluntary basis...but formalizing the process." The public would be notified of proposed releases, and general classes of experiments might be exempted from stringent review. Issuance of permits would continue to come under the jurisdiction of several federal agencies, mainly the Environmental Protection Agency (EPA), the U.S. Department of Agriculture (USDA), and the Food and Drug Administration (FDA). The bill also specifies that data from small-scale deliberate release tests be collected and assembled at a central location, such as USDA, for evaluating future commercial-scale proposals.

The bill would amend certain sections of the Toxic Substances Control Act to clarify how EPA may better apply that law, which was written with chemicals in mind, to microorganisms. Although other statutes governing regulatory agencies would remain largely unchanged, the draft bill specifies more explicitly the responsibility of USDA to conduct environmental reviews than do current statutes.

An interagency management board would be created so that EPA, USDA, and FDA officials could assist one another with their review and enforcement responsibilities. Thus, for proposals that seem to overlap agencies, the board would determine which agency will conduct the primary review—here again formalizing what is now an *ad hoc* process. The purpose is "not to add to the burden, but to have a legal foundation for what we're now doing," Simon notes.

Further, the bill preempts states from prohibiting experiments that are reviewed and approved by a federal agency. However, states can continue to participate in the review process by submitting comments and calling special meetings. Moreover, the states are not preempted from regulating proposed commercial-scale use of engineered organisms within their borders.

—Jeffrey L. Fox