Future Plans

Although the workshop in San Jose was a great success in terms of participation and the level of scientific information exchange involved, it only represented the second of three objectives for the "Crop Protection Chemistry in Latin America" IUPAC project (# 2003-013-1-600). The project also aims to develop recommendations for future advancement of crop protection chemistry in Latin America. Although the results of the workshop are still being evaluated, three preliminary areas of emphasis and future action have so far been proposed.

First, the importance of pesticide **product specifications** as a means of controlling the quality of locally available products was emphasized. The harmonized FAO/WHO process has been well documented and supported by a past IUPAC project (# 640/20/87), but satisfactory application of the process in some Latin American countries would be greatly assisted by specific training of the personnel involved. Therefore, a hands-on training session involving several key international experts and perhaps 15 to 20 or more of the key regulatory experts and analysts from the region has been proposed.

Second, the importance of **ecological risk assessment** methods for the safety evaluation of pesticide products was emphasized. The ongoing IUPAC project on development of simplified methods for ecological risk assessment will be of great assistance in this regard (# 2004-011-1-600), but further dissemination of the outcomes of this project and also development of additional levels of refinement to address the inevitable "problem cases" must be addressed. In addition, it is vitally important that the various Latin American stakeholders for crop protection chemistry, government, industry and academia, develop a consensus regarding the tiers of assessment to be employed and the risk mitigation and management approaches to be endorsed. Therefore, the formation of a Latin America ecological risk assessment working group has been proposed.

Third, the importance of **education** in achieving scientifically sound and harmonized approaches for regulation was recognized. Of primary importance is outreach to the key leaders and influencers within the Latin America crop protection chemistry field, including regulatory officials, industry leaders, technical specialists, agricultural consultants, and researchers. One issue currently slowing advancement in this area is a shortage of comprehensive and affordable crop protection chemistry information resources in the Spanish language. Two action steps were proposed to help address this issue. First, the IUPAC *Glossary of Terms Related to Pesticides*, currently being updated as part of an ongoing IUPAC project (# 2004-002-1-600), will be translated into Spanish with the cooperation of the FAO and IAEA. Second, the excellent textbook *Pesticides and the Environment*, co-authored by workshop lecturer Gerry Stephenson of the University of Guelph, will be reviewed and edited by the IUPAC Subcommittee on Crop Protection Chemistry and subsequently translated into Spanish. Particular emphasis will be placed on Latin American considerations.

For Further Information

The IUPAC workshop in Costa Rica was the sixth in a developing series of such crop protection chemistry-related workshops organized by the DCE since 1988. Past workshops have been held in Brazil, China, Korea, Taiwan, and Thailand. The papers from the Costa Rica workshop proceedings are available at the Web site listed below.

Ken Racke <kracke@dow.com>, a global regulatory leader with Dow AgroSciences in Indianapolis, Indiana, USA, was chair of the international organizing committee for the workshop. Dr. Racke is currently president of the IUPAC Division of Chemistry and the Environment (DCE), and has been active with the Subcommittee on Crop Protection Chemistry for several years. His interests include environmental considerations related to pesticide use and establishment of international standards for pesticide management.

Elizabeth Carazo <ecarazo@cariari.ucr.ac.cr>, a professor at the University of Costa Rica in San Jose and director of the Centro de Investigación en Contaminación Ambiental, was chair of the local organizing committee for the workshop and project leader on behalf of IUPAC. Carazo has been active with the DCE Subcommittee on Crop Protection Chemistry for several years, and has a particular interest in the environmental aspects of pesticides and other contaminants.

Graham Roberts <grarob@bigpond.net.a>, a scientist with the Department of Primary Industries in Victoria, Australia, was a member of the international organizing committee for the workshop. Roberts has been active with the DCE Subcommittee on Crop Protection Chemistry for several years, and has a particular interest in food residue considerations for pesticides and human dietary intake. He has also served on the Australian delegation to the Codex Committee on Pesticide Residues for a number of years.

To access IUPAC projects visit <www.iupac.org/divisions/VI/cp6.html>.

www.iupac.org/projects/2003/2003-013-1-600.html