Ecological Risk Assessment Workshop.(2016)

John B Unsworth[1]& **Joseph O Lalah[2]**

[1]Consultant

[2]*Department of Chemical Science and Technology Technical University of Kenya,

Abstracts

The IUPAC-supported project "A Global Framework for Implementing Consistent Ecological Risk Assessment for Pesticides for Sustainable Agriculture" has elicited a great deal of interest. Following workshops in China, Colombia, and Chile, a fourth workshop was hosted by the Technical University of Kenya in Nairobi 25-26 February 2016.

Losses due to crop pests and diseases can be significant. In sub-Saharan Africa, for example, reported losses in maize can be up to 50% due to stem borers, up to 75% due to fungal attack by grey leaf spot, and up to 90% because of weed competition. [1] Pesticides are a necessary tool to reduce crop losses and increase production to feed growing populations, particularly in countries such as Kenya. However, with the use of pesticides comes the need to keep the ecological impact to a minimum. A key to the safe and sustainable use of a pesticide is to evaluate how likely it is that the environment may be impacted as a result of exposure to the pesticide. This requires carrying out an ecological risk assessment. Many countries include an ecological risk assessment in their registration requirements, but risk assessment is an evolving science, and it is important that the current best practices are understood and implemented properly, particularly in scientifically emerging regions. An ecological risk assessment can be broken down into several different steps:

Planning
Problem formulation
Analysis
Risk characterization
Risk management

These five major phases, together with international approaches to ecological risk assessment, were discussed in detail during the workshop, which was opened by Professor Alex Muumbo, Executive Dean, Faculty of Engineering Science and Technology, on behalf of the Vice-Chancellor of the Technical University of Kenya. Six lecturers from industry, academia, and government gave a total of 12 presentations. Closing remarks were made by Professor Shem O. Wandiga (Institute of Climate Change, University of Nairobi). The presentations were well received by the 32 participants, who came mainly from Kenya, but also from Uganda and Tanzania. After each presentation, and during breaks in the programme, participants were able to discuss all aspects of ecological risk assessment, including good modelling practices, scenario development, and local requirements. In addition, they were able to network with the experts present. Each participant received copies of the presentations and a supplementary guidance document on the development of ecological risk assessments was made available to them. They were also presented with certificates of participation. As with the previous workshops, the participants agreed that they were given much useful information that enabled them to better understand the complexities of ecological risk assessment. Thanks are due to IUPAC, ACS-AGRO, and CropLife International for supporting the Workshop.

Chemistry International Vol. 38. pp 32-32 (2016).
See more at: https://www.degruyter.com/view/j/ci.2016.38.issue-5/ci-2016-0523/ci-2016-0523.xml