Consensus Communication

Public Forum on Plant Molecular Farming

Plant molecular farming uses the science of genetic engineering to produce substances for scientific, medical or industrial use. Some potential products of molecular farming are antigens for vaccines that can be mass produced in plants and used to respond to diseases such as cancer, diabetes, rabies, foot and mouth disease and the common cold.

October 30, 2001, in Ottawa, Ontario, Canada - the Canadian Food Inspection Agency (CFIA) held a Public Forum to solicit the public's views on plant molecular farming. The CFIA is responsible for regulating plants with novel traits and recognizes that plant molecular farming poses a number of regulatory challenges. The Agency is conferring with a wide range of people while products of molecular farming are still years away from the marketplace.

The public forum on plant molecular farming was held in the Auditorium of the Museum of Nature in Ottawa. The moderator, Alain Rabeau of Intersol Consulting Associates Ltd., opened the forum at 7 pm by introducing the four panelists. Bart Bilmer, Director of the Office of Biotechnology, was invited to give some opening remarks, after which the panelists gave presentations covering a range of issues related to plant molecular farming:

Dr. Louis Vézina, from Medicago Inc., gave an introduction to plant molecular farming, and an overview of some potential medical applications of the technology. Mr. Harry Richards, of the University of North Carolina at Greensboro, presented some of the potential environmental impacts of plant molecular farming applications.

Dr. Bill Leask, of the Canadian Seed Trade Association, briefly discussed some of the production challenges and considerations applicable to different applications of plant molecular farming. Finally, Dr. David Castle, of the University of Guelph, discussed the ethical debate surrounding the introduction of new technologies, such as plant molecular farming.

Some 75 to 100 people attended the forum - following the presentations, audience members were invited to present their views and concerns, and to ask questions of the panelists. Among the issues and concerns raised with regards to the application of plant molecular farming were:

- how to achieve an equitable distribution of the potential benefits of plant molecular farming
- how to address intellectual property and liability questions
- how to monitor and assess potential long-term health and environmental effects

A summary of these discussions was presented the following day at a technical consultation meeting, organized by the CFIA's Plant Biosafety Office, and also held in Ottawa. Participants to the multi-stakeholder consultation represented academia, government, industry, provinces and non-governmental organizations interested in health and the environment. The consultation will assist in the development of guidelines specifically related to plant molecular farming.