

# South Asia Biosafety Program

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## PRESENTATIONS ARE NOW AVAILABLE FROM THE 2<sup>ND</sup> ANNUAL SOUTH ASIA BIOSAFETY CONFERENCE IN SRI LANKA

Please visit  
[http://cera-gmc.org/ERA\\_Conference\\_Colombo2014](http://cera-gmc.org/ERA_Conference_Colombo2014)

## NEW BOOK ON PLANT BIOTECHNOLOGY: EXPERIENCE AND FUTURE PROSPECTS



**ABSTRACT:** By the year 2050, there will be more than 9 billion people in the world; nearly 3 billion more than today. The world's population will increase by over 700 million in the next 10 years – much of it in regions which are currently in a food deficit. How can governments ensure a secure and stable food supply for their citizens? Can current agricultural production practices and technologies provide for an expanding population in a sustainable manner? In the February 2010 summit of the Organization for Economic Cooperation and Development (OECD), agricultural ministers recognized the necessity that "innovation, including transfer of technologies, is fostered in order to increase productivity, enhance efficiency, improve sustainable resource use, respond to climate change and reduce waste including through balanced protection of intellectual property rights, and a regulatory environment conducive to innovation and new technology."

Technology alone cannot solve problems associated with food supply and distribution – they have not done so in the past, and will not do so in the future. But biotechnological innovations have played crucial roles, and will do so in the future. Students of many disciplines and the general public are interested in examining the development and adoption of innovative biotechnologies applied in agriculture in the world's largest economies and in developing countries, which are themselves changing rapidly to address these concerns. We are now approaching two decades of experience of deployment of transgenic crops in agroecosystems, and we are still very much in the early stages of technological development, deployment and adoption of resulting plants (cereals, vegetables and trees). What are these biotechnologies today that can enhance agricultural productivity and produce medicines, how are they currently deployed, what are some near-term realistic expectations, if these biotechnologies are to be a part of sustainable agriculture?

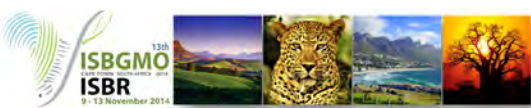
**LINK TO ACCESS THE BOOK:** <http://bit.ly/1slh0yf>

## SIGN UP TODAY FOR ISBGMO13 IN SOUTH AFRICA

[HTTP://ISBR.INFO/ISBGMO13](http://isbr.info/isbgmo13)

The International Society for Biosafety Research (ISBR) and the Local Organising Committee are pleased to announce that Cape Town, South Africa will be hosting the International Symposium on the Biosafety of Genetically Modified Organisms (ISBGMO) from 9-13 November 2014. The conference will be held at the The Westin, Cape Town.

The conference theme for ISBGMO13 is advancing the environmental risk assessment of GMOs to address biosafety in a global society. For more information, go to the official conference website at <http://isbr.info/ISBGMO13>.



## Stakeholder Workshop on the Finalization of Guidelines for the Environmental Risk Assessment of Genetically Engineered Plants



The Ministry of Environment and Forests (MOEF), Govt. of the People's Republic of Bangladesh, formed a nine member committee headed by the Director General of the Department of Environment (DoE) for drafting the Guidelines for the Environmental Risk Assessment (ERA) of Genetically Engineered Plants. The members of the committee were selected from different organizations who have been directly involved on various research and development work related to agricultural biotechnology. The South Asia Biosafety Program (SABP) assisted the drafting committee by developing the "zero draft." The committee revised the draft through a series of consultation meetings.

To finalize this draft, a stakeholder workshop was held on August 20, 2014, at the BRAC Center Inn, Mohakhali, Dhaka. Approximately 32 participants from different NARS Institutes, universities, government ministries and NGOs attended this workshop.

A short inaugural ceremony was held before the workshop. Prof. Dr. Naiyyum Choudhury, member of the Biosafety Core Committee (BCC) and the ERA drafting committee, chaired during the inaugural ceremony. Mr. Mohammed Solaiman Haider, Deputy Director of the DoE and the Member Secretary of the Drafting Committee, offered the welcome address. He also briefly described the background of the development of the ERA guidelines. Dr. Andrew Roberts, Deputy Director of Center for Environmental Risk Assessment (CERA), gave an overview highlighting the objective of the workshop as well as suggestions on what needs to be done in the future to implement these guidelines.

Dr. Joseph Huesing, Senior Biotechnology Adviser, USAID/BFS, USDA/ARS OIRP, shared that he appreciated the initiatives taken by the

Ministry of Environment and Forests for developing these important guidelines. He shared that by implementing these guidelines it may be possible for the researchers to assess and minimize the risks, if any, during the field trials of the GE crops. He also thanked the members of the drafting committee for the finalization of the ERA guidelines within the shortest possible time.

Prof. Dr. M. Imdadul Hoque, Country Coordinator of SABP, gratefully acknowledged the financial and technical supports from various individuals and organizations, namely, USAID, MOEF, DOE, BARC and the individual members of the committee for sparing their valuable time during the preparation of the guidelines. He also thanked all participants of the workshop for joining in the finalization of the ERA guidelines.

After the inaugural ceremony, Mr. Haider read out the drafted guidelines and the participants of the workshop gave several suggestions on various topics of the guidelines. After thorough discussion, the relevant suggestions were added in the final version of the ERA guidelines. After necessary corrections, this final version will be submitted to the Ministry of Environment for final approval and gazette notification.

Prof. Choudhury in his concluding remarks thanked SABP, specifically Dr. Roberts, for developing the "zero draft" and providing technical and financial support during the preparation of this guidelines. He also thanked the Director General, Department of Environment, the Chair of the drafting committee, Mr. Solaiman Haider, Member Secretary, and the drafting committee for their valuable contribution during the finalization of the guidelines.





## The Biosafety in Pakistan Grants Program Workshop: Research Updates



The first workshop for the Biosafety in Pakistan Grants Program (BRPGP) was held on September 14, 2014, in conjunction with the South Asia Biosafety Conference. BRPGP has been established to support research projects designed to improve understanding of the interactions between genetically engineered crops, agricultural production and the environment in Pakistan, as it relates to environmental risk assessment and the conservation of biodiversity.

The BRPGP is managed by the Center for Environmental Risk Assessment (CERA), ILSI Research Foundation, as part of the biosafety component of the Pakistan Strategy Support Program (PSSP).

The September 14<sup>th</sup> workshop consisted of short presentations on the research progress of the BRPGP funded grantees from the 2012 and 2013 grants cycles. The program also gave an opportunity for grantees and the advisory committee members to meet in person. Below are the grantees and project titles. All the research presentations have been posted on the CERA website. To view all the grantees presentations, please visit [http://cera-gmc.org/BRPGP\\_Workshop\\_Colombo2014](http://cera-gmc.org/BRPGP_Workshop_Colombo2014)



### 2012 GRANTEES

**DR. FIAZ AHMAD**

**DR. SHAUKAT ALI**

**KHADIM HUSSAIN**

**DR. HABIB IQBAL JAVED**

**DR. SAIFULLAH KHAN**

**DR. IQRAR AHMAD RANA**

### PROJECT TITLES

Effect of *Bt* Cotton on Chemistry, Microbial Community Structure and Enzymatic Activity in the Rhizosphere Soil

Potential Risk for Cross Resistance Development in Cotton Growing Areas of Pakistan Biosafety, Risk Assessment and Management with Reference to GM (Cry1Ac) Cotton

Prevalence of Insect Pests, Predator, Parasitoids and Their Survival in GE Corn Fields in Pakistan

Collection of Baseline Information about Papaya Crop Cultivation in All Growing Areas of Sindh Pakistan

Impact Assessment of the Transgenic Sugarcane Over Expressing Antifungal Proteins on Endophytic and Rhizospheric Microorganisms

### 2013 GRANTEES

**DR. KHUDA BAKHSH**

**DR. SABIR HUSSAIN**

**DR. MUHAMMAD NAVEED**

**DR. MUHAMMAD SALEEM ARIF**

**DR. TANVIR SHAHZAD**

### PROJECT TITLES

Assessing Management Practices and Externalities of *Bt* Cotton Plantations in Paksitani Punjab

Ecological Impact of Transgenic *Bt* Cotton Hybrids on Soil Biological Attributes of Varying Agricultural Soils in Pakistan

*Earias* spp. Survival to Transgenic *Bt* Cotton Strains Having Different Protein Levels

Linking Cry Protein Persistence with Microbial Diversity, Enzymatic Activity, Nutrient Cycling and Gaseous Emissions in Soils Under *Bt* Cotton in Punjab

Impact of Rhizodeposition and Incorporation of Residues from *Bt* Cotton on Soil Ecosystem Processes of Carbon and Nitrogen Cycling



EVENT	ORGANIZED BY	DATE	WEBSITE
<b>INDIA</b>			
National Conference on Pulses: Challenges and Opportunities under Changing Climate Scenario	Jawaharlal Nehru Krishi Vishwa Vidyalaya, Indian Society of Pulses Research and Development, Indian Institute of Pulses Research, and Indian Council of Agricultural Research	September 29 – October 1, 2014 Jabalpur	<a href="http://www.iipr.res.in/pdf/ncp_10july2014.pdf">http://www.iipr.res.in/pdf/ncp_10july2014.pdf</a>
Short Course on Application of Cellular, Molecular and Genomics Tools in Crop Improvement	Central Potato Research Institute, Shimla	October 7-16, 2014 Shimla	<a href="http://cpri.ernet.in/news/Short_Course_Brochure_Cl.pdf">http://cpri.ernet.in/news/Short_Course_Brochure_Cl.pdf</a>
National Seminar on Emerging Problems of Potato	Central Potato Research Institute, Shimla	November 1-2, 2014 Shimla	<a href="http://www.nsepp.in/index.html">http://www.nsepp.in/index.html</a>
Winter School on Strategies to Enhance Oilseed Brassica Production Under Climate and Resource Constraint Scenario	Directorate of Rapeseed-Mustard Research, Bharatpur	November 11-December 1, 2014 Bharatpur	<a href="http://www.drmr.res.in/publication/DRMR_Winter_School.pdf">http://www.drmr.res.in/publication/DRMR_Winter_School.pdf</a>
National Conference of Plant Physiology (NCPP-2014) On "Frontiers of Plant Physiology Research: Food Security and Environmental Challenges"	Department of Plant Physiology Orissa University of Agriculture and Technology Bhubaneswar and the Indian Society for Plant Physiology	November 23-25, 2014 Bhubaneswar, Orissa	<a href="http://www.ouat.ac.in/download/NCPP%202014.pdf">http://www.ouat.ac.in/download/NCPP%202014.pdf</a>
Course IV - Applications of Biotechnology and Its Regulation	The Energy and Resources Institute (TERI)	December 8–26, 2014 Gurgaon	<a href="http://www.teriin.org/index.php?option=com_events&amp;view=details&amp;sid=691&amp;Itemid=110">http://www.teriin.org/index.php?option=com_events&amp;view=details&amp;sid=691&amp;Itemid=110</a>
<b>INTERNATIONAL</b>			
12 <sup>th</sup> Asian Conference and Expert Consultation on Maize for Food, Feed, Nutrition and Environmental Security	Asia-Pacific Association of Agricultural Research Institutions (APAARI), International Maize and Wheat Improvement Center (CIMMYT) and Vietnam Academy of Agricultural Sciences (VAAS)	October 27-29, 2014 Hanoi, Vietnam	<a href="http://www.apaari.org/events/12th-conference-on-maize.html">http://www.apaari.org/events/12th-conference-on-maize.html</a>
Webinar on Biosafety	Food and Agriculture Organization of the United Nations (FAO)	October 31, 2014 Online	<a href="http://www.fao.org/food/food-safety-quality/events-projects/event/detail/en/c/242232/">http://www.fao.org/food/food-safety-quality/events-projects/event/detail/en/c/242232/</a>
13 <sup>th</sup> International Symposium on the Biosafety of Genetically Modified Organisms (ISBGMO13)	International Society for Biosafety Research (ISBR)	November 9-13, 2014 Cape Town, South Africa	<a href="http://isbr.info/ISBGMO13">http://isbr.info/ISBGMO13</a>



**SOUTH ASIA**  
BIOSAFETY PROGRAM

**The South Asia Biosafety Program (SABP)** is an international developmental program implemented in India, Bangladesh and Pakistan with support from the United States Agency for International Development. SABP aims to work with national governmental agencies and other public sector partners to facilitate the implementation of transparent, efficient and responsive regulatory frameworks for products of modern biotechnology that meet national goals as regards the safety of novel foods and feeds, and environmental protection.



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