

South Asia Biosafety Program

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**Pakistan Grants Video
Conference Series Begins**

PAGE 2

**Spotlight on the Biosafety
Research in Pakistan Grants
Program**

PAGE 3

**Feedback Requested for
the 3rd Annual South Asia
Biosafety Conference**

PAGE 4

Calendar of Events

PAGE 4



ILSI
Research
Foundation

New Leadership at the ILSI Research Foundation

We are excited to announce that Dr. Morven McLean has been appointed Executive Director of the ILSI Research Foundation and Dr. Andrew Roberts has been promoted to the position of Director at the ILSI Research Foundation, with dual responsibility for the Center for Environmental Risk Assessment (CERA) and the Center for Safety Assessment of Food and Feed (CSAFF).

Dr. McLean joined the ILSI Research Foundation in 2009 as Director of the Center for Environmental Risk Assessment. In 2013, she was also appointed Director of the foundation's Center for Safety Assessment of Food and Feed. Prior to joining ILSI, Dr. McLean held the position of Chief of Canada's Plant Biotechnology Office, the federal regulatory authority for the assessment and release of genetically modified plants. She was also President of AGBIOS, a consultancy that worked internationally with governments, nongovernmental organizations, and the public and private sectors on issues of policy and regulation pertaining to genetically modified foods, crops, and forest tree species. She has a MSc in environmental biology (University of Guelph) and a PhD in plant virology (University of British Columbia).

Dr. Roberts joined the Research Foundation in December 2009 as the Deputy Director of CERA, where his first tasks included developing tools and materials for use in training and capacity building related to the problem formulation approach to environmental risk assessment (ERA). He currently leads applied research projects in the areas of ERA under low-exposure conditions and ERA of plants developed using RNA interference. Andrew has worked tirelessly to develop and implement highly respected and impactful capacity building projects in Bangladesh, Pakistan, and Vietnam. He also provides significant technical support in the many other countries where CERA is active.

BANGLADESH

Key Messages from the 6th International Botanical Conference



The 6th International Botanical Conference was held on December 6-7, 2014 at the Department of Botany, University of Dhaka, Bangladesh. This conference was organized by the Bangladesh Botanical Society in collaboration with the University of Dhaka, South Asia Biosafety Program (SABP), Hamdard Laboratories (Waqf) Bangladesh Ltd., and many other national organizations acting as sponsors and co-sponsors. Approximately 350 participants from home and abroad representing universities, public and private colleges, national agricultural research institutes, private and NGO sector laboratories as well as policy makers attended this conference. International participants in attendance traveled from Japan, India, Iran and the USA.

The theme of the conference was the "Role of Botanists in Global Climate Change". The conference included paper presentations in different scientific sessions and a poster session covering various aspects of plant sciences including general botany, plant biotechnology, biosafety, food security and climate change. SABP sponsored the "Biotechnology for Crop Improvement and Biosafety Requirements" session.

The inaugural ceremony of the conference was held at the Nabab Nawab Ali Chowdhury Senate Bhaban of the University of Dhaka. The conference was inaugurated by Mr. Tofail Ahmed, MP, Honorable Minister, Ministry of Commerce, Government of the People's Republic of Bangladesh as the Chief Guest. Mrs. Meher Afroze Chumki,

Continued on Page 2



MP, Honorable Minister, Ministry of Women and Children Affairs, Government of the People's Republic of Bangladesh, Prof. Dr. AAMS Arefin Siddique, Honorable Vice Chancellor, University of Dhaka and the Chief Patron of the Conference and Dr. Hakim Md. Yusuf Harun Bhuiyan, Honorable Managing Director, Hamdard Laboratories (Waqf) Bangladesh were present as the special guests.

The inaugural ceremony began with the welcome address by Prof. Dr. M. Imdadul Hoque, Secretary General, Bangladesh Botanical Society and the session was chaired by Prof. Dr. M. Mozammel Haque, President of Bangladesh Botanical Society. The keynote address on the conference theme was presented by Prof. Dr. Ansarul Karim, former Professor of Botany, Chittagong University and Managing Director, Environmental Conservation Management Consultants Ltd., Bangladesh. In his presentation, Prof. Karim highlighted the consequences of climate change in most of the developing countries, especially in Bangladesh. He also pointed out the tasks needed to mitigate the after effects of climate change.

Approximately 60 presentations were made in the five scientific sessions during the two-day conference. Topics included conservation and utilization of plant resources; plant and environment and utilization of coastal and marine resources; microbes, plant disease and waste management; general botany and food production; and biotechnology for crop improvement and biosafety requirements.



In the SABP sponsored session on biotechnology, a total of 13 papers were presented. Dr. Andrew Roberts presented his paper on the need for biosafety regulations in genetically engineered plants. Prof. Rakha Hari Sarker gave an updated status on agricultural biotechnology research and development in Bangladesh during his presentation. Prof. M. Imdadul Hoque described the global status of biotech crops and also highlighted the contribution of SABP towards developing biosafety regulatory regimes in Bangladesh. Mr. Solaiman Haider, Deputy Director, Department of Environment (DoE) and Member Secretary, Biosafety Core Committee (BCC) emphasized the development and status of biosafety regulatory regimes in Bangladesh.

The other scientific papers presented in this session gave insight into the scientific endeavors by Bangladeshi researchers at home and abroad. The research area that they covered ranged from simple tissue culture to plant genetic transformation and spectroscopy NMR studies. Several research activities presented in this session were completed through the successful collaboration with international institutes, including the International Centre for Genetically Engineering and Biotechnology (ICGEB), as well as with public and private universities and research organizations.

A set of recommendations were adopted during the concluding session of the conference.

PAKISTAN

Pakistan Grants Video Conference Series Begins



The South Asia Biosafety Program will be starting a video conference lecture series in Pakistan this month. Grantees from the Biosafety Research in Pakistan Grants Program (BRPGP), along with other researchers and biosafety stakeholders in Pakistan will be invited to participate which will be hosted at the Department of BIO Technology at Quaid-i-Azam University on January 29th.

The first program will include two remote video presentations. Prof. Alan Gray, the President of the International Society for Biosafety Research (ISBR) will provide an introduction to the society and a recap of the recent International Symposium on Biosafety of GMOs (ISBGMO) held in Cape Town, South Africa. The second presentation, from Dr. Andrew Roberts will cover international obligations related to Biosafety.

Spotlight on the Biosafety Research in Pakistan Grants Program



The Biosafety Research in Pakistan Grants Program (BRPGP) supports laboratory, field, and literature research that will significantly advance knowledge relevant to environmental risk assessment of genetically engineered plants in Pakistan.

The Biosafety Research in Pakistan Grants Program 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 PSSP is financially supported by the US Agency for International Development (USAID) through the International Food Policy Research Institute (IFPRI), which manages PSSP. The Biosafety Research in Pakistan Grants Program recognizes the need for biosafety research as part of a broader effort to support science-based decision-making and policy development and will fund research aimed at addressing the effects of agricultural biotechnology, particularly transgenic crops, on the environment and biodiversity in Pakistan.

Grantees come from agricultural or environmental research institutions and universities in Pakistan.

All grantees work to:

- Address the effects of genetically engineered (transgenic) crops on the environment.
- Be relevant to Pakistan and take place in Pakistan.
- Demonstrate applicability to environmental risk assessment of transgenic plants and regulatory decision-making in Pakistan.

In this month's SABP newsletter, we will be featuring Dr. Faiz Ahmad Joyia

2014 GRANTEE: Dr. Faiz Ahmad Joyia

JOB TITLE: Assistant Professor, Center of Agricultural Biochemistry and Biotechnology (CABB)

ORGANIZATION: The University of Agriculture Faisalabad

PROJECT TITLE: "Assessment of Leaky Maternal Inheritance in Transplastomic Tobacco Plants as a Serious Biosafety Concern"

PROJECT DESCRIPTION: Crops and weeds have been exchanging genes for centuries. However, introduction of transgenic technology has instigated the apprehensions about transgene flow because it allows introduction of novel fitness-related genes into an array of crops. Most cultivated plants mate with one or more wild relatives at least in some parts of their geographical distribution, numerous getting naturalized and persist as feral weedy populations. In this context, GM plants can potentially disperse transgenes into nearby wild populations growing on roadsides, field margins or uncultivated areas, bringing along new phenotypic traits like insect resistance and tolerance to herbicides or abiotic stresses. The advent of transplastomic technology has reduced the probability of transgene dispersal through pollens by virtue of maternal inheritance in most crop plants. This is true as far as the transgene escape through pollens of transplastomic plants is concerned. However, the pollination of transplastomic plants with pollens from some of the weedy wild relatives resulting successful fertilization and seed setting may result a hybrid that will exhibit some traits of weedy wild paternal donor. If such an unsolicited, spontaneous hybrid serves as a maternal donor (with transgenic plastids) in next generation and transmits transgene, the transgene once contained due to maternal inheritance will be no more contained. The primary goal of this project will be conducting the biosafety studies of transplastomic tobacco (*Nicotiana tabacum*) harbouring antibiotic resistance gene as a selectable marker in the local environment of Pakistan. For this purpose transplastomic tobacco will be emasculated, pollinated with pollens from weedy relative and the resulting F1 and F2 populations will be examined for the extent of possible vertical transgene flow of antibiotic resistance genes.

To view all grant projects, visit the CERA website at:

http://cera-gmc.org/index.php/The_Biosafety_Research_in_Pakistan_Grants_Program

EVENT	ORGANIZED BY	DATE	WEBSITE
INDIA			
Indian Seed Congress 2015	National Seed Association of India	February 13-15, 2015 Agra	www.nsai.co.in/isc
5 th International Conference on Next Generation Genomics and Integrated Breeding for Crop Improvement	ICRISAT	February 18-20, 2015 Patancheru	http://ceg.icrisat.org/v-nggibci/
INTERNATIONAL			
Theoretical and Practical Course on Molecular Plant Breeding for Crop Improvement	Agricultural Genetic Engineering Research Institute - AGERI, Giza, Egypt	March 8-19, 2015 Giza, Egypt	http://www.icgeb.org/meetings-2015.html
IOSBC/WPRS Group 'GMOs in Integrated Plant Production'	Agroscope	June 1-3, 2015 Sofia, Bulgaria	Contact: michael.meissle@agroscope.admin.ch

Feedback Requested for the South Asia Biosafety Conference

The 3rd Annual South Asia Biosafety Conference will be convened in Dhaka, Bangladesh in September 2015. The organizers of this conference are seeking input on topics that should be considered for the agenda as it is important to keep this conference relevant and targeted to the needs of colleagues in South Asia. A short survey will be distributed in the coming weeks to give an opportunity to provide feedback.



Interested in contributing to the SABP Newsletter?

The SABP Newsletter, published monthly, is distributed to over 4000 regulators, scientists, policy makers and other stakeholders interested in agricultural biotechnology in South Asia. Each edition includes editorials, information about biosafety regulation and policy developments in India, Bangladesh and Pakistan, SABP and other capacity building activities in the region, and related science or news stories.

All contributions to the newsletter should have a clear connection to the mission of SABP, relate to South Asia and cannot be promotional. For more information or for your article to be considered, please email Libby Williams at llwilliams@ilsa.org.



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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