AUGUST 2017

## South Asia Biosafety Program

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# **New Speakers Announced**

Register today for the 5<sup>th</sup> Annual South Asia Biosafety Conference September 11-13, 2017 Taj West End, Bangalore, India

The South Asia Biosafety conference provides an opportunity to hear from leading scientists representing regulatory agencies, public sector research institutions, and the private sector in South Asia and internationally. Registration is open until September 1, 2017 online or by mailing the completed form on page 6. Learn more by visiting the conference website at http://sabc.biotech.co.in.

INDIA

#### Decisions on Ease of Doing Business by the Genetic Engineering Appraisal Committee Posted



The Genetic Engineering Appraisal Committee (GEAC), the Apex Regulatory Committee housed in Ministry of Environment, Forest and Climate Change (MoEF&CC) under the "Rules for the Manufacture, Use, Import, Export and Storage of Hazardous micro-organisms/Genetically engineered organisms or cells (Rules 1989)" took the following decisions as part of "Ease of Doing Business" initiative:

## A. No-Objection Certificate (NOC) from State Governments for Conduct of Confined Field Trials (CFTs)

In its 129<sup>th</sup> meeting held on July 20, 2016, GEAC has decided that State Governments should convey their decision to the applicant within a period of 90 days regarding NOC after receipt of application, else to be considered the decision as positive by the applicant.

#### B. NOC for conduct of Event Selection Trials (ESTs)

In its 130<sup>th</sup> meeting held on August 11, 2016, GEAC has decided that since ESTs are small scale experiments conducted strictly within the institutional premises, requirement of NOC from State Governments is exempted for conduct of ESTs.

#### C. Adoption of Environmental Risk Assessment (ERA) Guidelines

GEAC in its 130<sup>th</sup> meeting held on August 11, 2016 adopted the Environmental Risk Assessment (ERA) Guidelines for Genetically Engineered (GE) Plants, 2016 along with Risk Analysis Framework (RAF), 2016. Henceforth, applicants seeking permission for environmental release of GE plants need to submit their applications to GEAC as per the proforma in ERA Guidelines instead of existing Form-II B.

Source: http://www.moef.gov.in/divisions/csurv/geac/geac.PDF

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#### Key Messages from the State Level Biosafety Capacity Building Workshop Held at AAU, Anand

Dr. R. S. Fougat, Professor & Head, Department of Ag. Biotechnology, Anand Agricultural University, Gujarat



"The experts further informed the

delegates that the Biosafety Regulatory

Framework in India is very strong and

safe, which ensures a rigorous process

for monitoring and approval of GMOs in

the country. Additionally, they stressed

that GM crop varieties are as safe as

their non-GM counterparts."

On July 13, 2017, approximately 120 participants attended the biosafety capacity building workshop under the UNEP-GEF Supported Phase II Capacity Building Project on Biosafety at the Anand Agricultural University (AAU), Anand.

This state-level event was jointly organized by Ministry of Environment, Forest & Climate Change (MoEF&CC), Government of India, New Delhi; Biotech Consortium India Limited, New Delhi; AAU, Anand and the Department of Agriculture, Government of Gujarat.

In attendance were scientists, teachers, researchers and farmers from agricultural universities, research institutes, government agencies and private sector companies, including representatives of AAU; Maharaja Sayajirao University of Baroda (MSU); Central Salt and Marine Chemicals Research Institute (CSMCRI), Bhavnagar; Directorate of Medicinal and

Aromatic Plants Research, Boriavi; the State Department of Agriculture, Gujarat; and seed companies.

INDIA

Expert speakers included: Dr. B. Sesikeran Chairman, Review Committee on Genetic Manipulation (RCGM); Dr. Murali Krishna, Joint Director, MoEF&CC; Dr. Vibha Ahuja, Chief General Manager, Biotech Consortium India Limited (BCIL); Dr. Celia Chalam, Principal Scientist, National Bureau of Plant Genetic Resources (NBPGR), New Delhi; Dr. R.S. Fougat,

Professor and Head, Department of Agricultural Biotechnology, AAU, Anand; Dr. Chandermohan Singh, ICAR-Directorate of Groundnut Research, Junagadh; Dr. Rajesh Patkar, MSU, Baroda; Dr. Pradeep. K. Agarwal, CSMCRI, Bhavnagar; and Dr. R.S. Tomar, Junagadh Agricultural University, Junagadh.

The inaugural session was chaired by Dr. N. C. Patel, Vice Chancellor, AAU, Anand. In his opening remarks, Dr. Patel stated that 60-70% of a country's population depends on agriculture. Therefore, we should have a comprehensive agricultural policy, including genetically modified (GM) crops.

Dr. K.B. Kathiria, Director of Research and Dean, P.G. Studies, AAU, Anand, emphasized that GM organisms are needed to break the yield plateau in many crops in order to meet the ever-increasing demand of food around the world. Dr. Qureshi, Joint Director (Agriculture), stressed the need to create awareness among farmers who are actual end users of the technology. In his key note address, Dr. Sesikeran advocated the role of state governments in GM regulation and informed attendees that biosafety norms in India are very stringent, even though GM varieties are thoroughly tested for safety assessment during their developmental stages. He also discussed the reasons for poor acceptability of GM crops in India.

In the two technical sessions of the workshop, speakers emphasized that modern biotechnological tools have the potential for resolving several agricultural constraints, ranging from inherently low crop yields to stress-related issues arising from pests, diseases and drought.

However, as the transgenic varieties are developed through a series of techniques wherein genetic material is altered in a way that does not occur naturally by mating or natural recombination, concerns are

> persistently expressed about the safety, ethical and trade-related aspects of GMOs by consumers and environmentalists. This necessitates the need for regulation of GM products and their subjection to rigorous food and feed safety testing procedures. Accordingly, adoption of appropriate biosafety measures, including development and implementation of biosafety regulations, has been a high priority of countries using biotechnology for agricultural research and development.

The Indian government through MoEF&CC, the Department of Biotechnology, and various regulatory agencies like RCGM and GEAC, work to ensure that new agricultural biotechnology products are safe for animal and human health, and the environment. However, various stakeholders of biotechnology, including scientists, seed producers, the public in general and farmers, are still unaware of this regulatory framework and their procedures.

The objectives of this workshop were to create awareness among field staff conducting GM field trials on biosafety aspects and to discuss safety and regulatory aspects. Guidelines on how contained and confined field trials on GM crops should be conducted were included. The experts further informed the delegates that the Biosafety Regulatory Framework in India is very strong and safe, which ensures a rigorous process for monitoring and approval of GMOs in the country. Additionally, they stressed that GM crop varieties are as safe as their non-GM counterparts.

#### BANGLADESH

#### Highlights from the Capacity Building of Institutional Biosafety Committee Members

Dr. M. Imdadul Hoque, Dean, Faculty of Biological Sciences, University of Dhaka and Country Coordinator, South Asia Biosafety Program, Dhaka



Held in Joydebpur, Gazipur, Bangladesh on July 26, 2017, a daylong capacity building workshop was organized by the Bangladesh Agricultural Research Institute (BARI), the Implementation of National Biosafety Framework (INBF) Project of Department of Environment (DOE) and the South Asia Biosafety Program (SABP).

Approximately 40 participants attended the workshop, including and Dr. M. Khalequzzaman Akanda Chowdhury, National Project Coordinator (NPC) of the INBF Project and directors of several BARI divisions. The Institutional Biosafety Committee (IBC) members of BARI, the Bangladesh Rice Research Institute (BRRI), and the Cotton Development Board (CDB) were invited to attend. Additionally, select scientists directly involved in the contained and confined trials of the genetically engineered (GE) crops of the respective institutes joined.

The inaugural ceremony was chaired by Dr. Md. Lutfur Rahman, Director (Research), BARI. Dr. Andrew Roberts, ILSI Research Foundation, set the context and discussed the objectives for the training. Mr. Mohammed Solaiman Haider, Director (Planning), DOE and the Project Director, INBF, highlighted the activities of DOE related to biosafety as well as the activities being performed under the INBF Project.

Dr. Bhagya Rani Banik, Director General, BRRI, thanked the organizers for taking initiatives to hold this timely workshop in order to strengthen the capacities of the IBC members. She highlighted the activities being undertaken on golden rice at BRRI, including the trials in five locations which have successfully been completed. She also described that BRRI has applied for the importation of high iron and zinc-containing rice from the International Rice Research Institute (IRRI).

As the Chief Guest of the workshop, Dr. Abul Kalam Azad, Director General, BARI, thanked the South Asia Biosafety Program (SABP) and the INBF Project for holding this important workshop at BARI. He welcomed Dr. Roberts along with the four Indian speakers, specifically Dr. P. Chakrabarty, Assistant Deputy Director General- Plant Protection & Biosafety, Indian Council of Agricultural Research (ICAR); Dr. M. Sheshumadhav, Senior Scientist, Biotechnology, ICAR-Indian Institute of Rice Research; Dr. Alok Das, Scientist, ICAR-Indian Institute of Pulses Research; and Dr. Vibha Ahuja, Chief General Manager, Biotech Consortium India Limited (BCIL). During his presentation, Dr. Azad pointed out that fruit and shoot borer resistant Bt brinjal has been released by the government. Late blight resistant potato is also in the pipeline for releasing into the environment. Some other GE crops, like golden rice and Bt cotton, are also in different stages of trials. With this background, the workshop was very useful for strengthening the capacity of the IBC members and the scientists working directly in field trials of GE crops.

Following the inaugural ceremony, the scientific session began with



Dr. Chakrabarty gaving an overview of ICAR activities, especially focusing on the initiation of the Institutional Biosafety Officer (IBO) Pilot Project. He described that through this project they have been able to train IBOs of select ICAR institutes. Dr. M. Sheshumadhav and Dr. Alok Das, two ICAR scientists, described in detail their activities and experiences as IBOs. They pointed out that proper training is necessary for conducting their tasks in the IBC. They also thanked BCIL and SABP for offering them the necessary training on different aspects related to biosafety of GE crops.

Dr. Roberts gave a presentation on the Administrative Process Guidance document being drafted for the use of regulators as well as product developers of GE crops. He also introduced a proposed Biosafety Web Portal for Bangladesh. This website will serve as a resource to strengthen compliance with the regulatory framework and also to effectively facilitate research and development of agricultural biotechnology activities in Bangladesh through the regulatory process for the benefit of farmers and societies. Dr. Roberts shared that ICAR has already established a Biosafety Portal in India, which is available at http://biosafety.icar.gov.in.

Dr. Ahuja gave a presentation on biosafety in public sector agricultural research and product development.

Additionally, the scientists of BARI, BRRI and the CDB gave short presentations on their activities related to GE crop development and activities of the IBC. Mrs. Dil Afroza Khanam, Head, Biotechnology Division, BARI, gave an overview on the status of Bt brinjal, late blight resistant potato and also the work activities of the IBC. Dr. Md. Abdul Kader, Trial Manager, Golden Rice Project of BRRI, highlighted their golden rice confined field trial activities. Mr. Md. Akhteruzzaman, Chairperson, IBC of CDB, described the status of their activities on Bt cotton contained trials. All three presenters also shared their constraints and limitations carrying out their activities at the IBC of their respective institutes.



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| VENT   | ORGANIZED BY   | DATE   | WEBSITE                      |
|--|--|--|------------------------------|
| INDIA  |  |  |                              |
| Series of Consultation Workshops on<br>Mainstreaming of Biodiversity: National<br>Biodiversity Action Plan, National<br>Biodiversity Targets and India's Sixth<br>National Report to Convention on<br>Biological Diversity | Ministry of Environment, Forest and<br>Climate Change (MoEFCC), United<br>Nations Development Programme,<br>National Biodiversity Authority and<br>Biotech Consortium India Limited<br>(BCIL)  | July- October, 2017<br>Chandigarh, Guwahati,<br>Lucknow, Ahmedabad,<br>Hyderabad and Delhi | www.bcil.nic.in              |
| International Symposium on Horticulture:<br>Priorities & Emerging Trends   | Indian Council of Agricultural<br>Research (ICAR), New Delhi, Indian<br>Institute of Horticultural Research,<br>Bengaluru, India Society for<br>Promotion of Horticulture, IIHR,<br>Bengaluru, India International Society<br>for Horticultural Science (ISHS),<br>Belgium | September 5-8, 2017<br>Bangalore   | www.iihr.res.in              |
| International Symposium on Sugarcane<br>Research Co 205: 100 Years and Beyond  | ICAR-Sugarcane Breeding Institute,<br>Tamil Nadu Agricultural University,<br>The South Indian Sugar Mills<br>Association and Society for Sugarcane<br>Research and Development<br>Coimbatore   | September 17-20, 2017<br>Coimbatore  | http://bit.ly/ICAR_Sep2017   |
| International Conference and Expo on<br>Biotechnology and Healthcare   | Centre for Good Governance and<br>Prof. Jayashankar Telangana State<br>Agricultural University (PJTSAU)  | October 26-27, 2017<br>Hyderabad   | http://biotechconference.org |
| INTERNATIONAL  |  |  |                              |
| 5 <sup>th</sup> Annual South Asia Biosafety Conference   | SABP, ILSI Research Foundation,<br>Biotech Consortium India Limited<br>(BCIL)  | September 11-13, 2017<br>Bangalore, India  | http://sabc.biotech.co.in/   |

CALENDAR OF EVENTS



#### Gene Drive Symposium 2017: Recordings Now Available

Curious about the Gene Drive Symposium co-organized by the ILSI Research Foundation and the National Academies of Science, Engineering and Medicine? On July 19, 2017, over 70 people attended in Washington D.C. and 200<sup>+</sup> people tuned in via live stream, representing academia, government, private sector, non-profit and civil societies from around the world. In case you missed any of the symposium presentations, a full video playlist is now available online. Visit www.ilsirf.org/event/genedrives\_july2017/ to watch and learn more.



SOUTH ASIA

BIOSAFETY PROGRAM

The South Asia Biosafety Program (SABP) is an international developmental program implemented in India and Bangladesh 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.



BANGLADESH Prof. Dr. M. Imdadul Hoque Department of Botany University of Dhaka Dhaka - 1000 Bangladesh Email: mimdadul07@yahoo.com INDIA Dr. Vibha Ahuja Chief General Manager Biotech Consortium India Limited Anuvrat Bhawan, 5th Floor 210, Deendayal Upadhyaya Marg New Delhi 110 002 India Email: vibhaahuja.bcil@nic.in

UNITED STATES Mrs. Libby Williams Communications Manager ILSI Research Foundation 1156 Fifteenth Street N.W., Suite 200 Washington, D.C. 20005-1743 USA Email: Iwilliams@ilsi.org Twitter: @ILSIRF

To receive an electronic copy of this newsletter send your name, institutional information and e-mail address to: vibhaahuja.bcil@nic.in

## Agenda 5<sup>th</sup> Annual South Asia Biosafety Conference

September 11-13, 2017

Taj West End, Bangalore, India



#### September 11, 2017

#### 08:00 Delegate Registration

#### 09:30 Inaugural Ceremony

#### 11:00 PLENARY SESSION I: REGULATION AND CAPACITY BUILDING INITIATIVES IN SOUTH ASIA

Dr. K. Veluthambi, Madurai Kamaraj University, India

Mr. Md. Solaiman Haider, Department of Environment, Bangladesh

Mr. Jambay Dorji, Bhutan Agriculture and Food Regulatory Authority (BAFRA), Bhutan

Dr. Timothy Strabala, Environmental Protection Authority, New Zealand

#### 14:00 PLENARY SESSION II: CROP BIOTECHNOLOGY AND BIOSAFETY IN SOUTH ASIA

Participants are welcome to get involved with this year's program by submitting an abstract for an oral presentation for this session.

#### 16:00 LIGHTNING ROUND

Select posters will be presented by students and young scientists in five minute talks.

#### 17:30 POSTER SESSION

Conference participants are encouraged to share their work with colleagues by preparing a poster for this session. Presenting a poster is a noteworthy way to share expertise or accomplishment with the diverse group of attendees.

#### **19:30 WELCOME RECEPTION**

#### September 12, 2017

#### 09:00 PLENARY SESSION III: SOIL AND PLANT MICROBIOMES

Dr. James Germida, University of Saskatchewan, Canada

Dr. Jacob Parnell, Novozymes North America Inc., United States

Dr. Atul Kumar Johri, Jawaharlal Nehru University, India

#### **13:30 WORKSHOPS (OPTIONAL)**

Participants are invited to optional half day workshops. Please mark which event you will attend at the time of registration. Please note, space is limited and registration for each workshop is first come, first served.

Workshop I: Thinking Ahead: Designing Confined Field Trials to Maximize Data Transportability

Workshop II: Best Practices for Public Sector GE Product Development Programs

Workshop III: Intersection of the Cartagena Protocol and the Indian Biosafety Regulatory System

#### September 13, 2017 09:00 PLENARY SESSION IV: SYNTHETIC BIOLOGY

Dr. Pawan K. Dhar, Jawaharlal Nehru University, India

Dr. Manju Bansal, Indian Institute of Science, India

Dr. John Teem, ILSI Research Foundation, United States

Dr. Andrew Roberts, ILSI Research Foundation, United States

#### **13:30 POSTER SESSION AWARDS**

Prizes will be awarded for the top two outstanding posters.

### 14:00 PLENARY SESSION V: NEW APPLICATIONS OF BIOTECHNOLOGY: FOCUS ON FORESTRY AND

#### BIOFUELS

Dr. Stephen Mayfield, University of California, San Diego, United States

Dr. Shashi Kumar Rhode, International Centre for Genetic Engineering and Biotechnology, India

Dr. Bhavanath Jha, Central Salt and Marine Chemicals Research Institute, India

Dr. Timothy Strabala, Environmental Protection Authority, New Zealand

Dr. Tomal Dattaroy, Reliance Industries Limited, India

#### 17:30 Closing Remarks and Adjournment

## **Registration Form** 5<sup>th</sup> Annual South Asia Biosafety Conference

September 11-13, 2017

Taj West End, Bangalore, India

Registrations are limited to 120 for the conference. Registrants that cannot be accommodated will be added to a waitlist, and notified if space becomes available.

Attach mailing label from brochure,

or your business card.

Name Preferred on Badge \_\_\_

Complete the following if the information on the mailing label is incorrect or no label is provided.

| Registrant is:  |           |          |     |     |
|-----------------|-----------|----------|-----|-----|
| Gender          | Male      | Female   |     |     |
| Title           | Mr.       | Mrs.     | Ms. | Dr. |
| First Name      |           |          |     |     |
| Middle Initial  |           |          |     |     |
| Last/Surname    |           |          |     |     |
| Job Title       |           |          |     |     |
| Employer/Comp   | any/Insti | tution _ |     |     |
|                 |           |          |     |     |
| Address         |           |          |     |     |
| Street          |           |          |     |     |
| City            |           |          |     |     |
| State/Province  |           |          |     |     |
| Zip/Postal Code |           |          | _   |     |
| Country         |           |          |     |     |
| Telephone       |           |          |     |     |
|                 |           |          |     |     |
| E-mail          |           |          |     |     |

Select one optional workshop to attend on September 12:

Workshop I: Thinking Ahead: Designing Confined Field Trials to Maximize Data Transportability (limited to 30 attendees)

Workshop II: Best Practices for Public Sector GE Product **Development Programs (limited to 25)** 

Workshop III: Intersection of the Cartagena Protocol and the Indian Biosafety Regulatory System (limited to 40)

| Registration*   |   |       |  |  |  |
|---|---|-------|--|--|--|
| Category  | Fee   |       |  |  |  |
|   | INR   | US\$  |  |  |  |
| Industry  | Rs. 6,500/-   | \$100 |  |  |  |
| Research Institution,<br>Universities, Individual<br>Experts        | Rs. 3,500/-   | \$50  |  |  |  |
| Students  | Rs. 2,700/-   | \$40  |  |  |  |
| BCIL Biotech Club<br>Members  | 25% discount  |       |  |  |  |
| Additional delegates from<br>same organization (except<br>students) | 25% discount  |       |  |  |  |
| Government Departments<br>and Ministries                            | No fee up to two nominations<br>and Rs. 2,000/- each for additional<br>nomination. Registration must<br>be submitted through email to<br>vibhaahuja.bcil@nic.in and confirmed<br>by organizers. No online registration. |       |  |  |  |

\*No free on-the-spot registrations.

In case you face difficulty in the online registration, please download the registration form and send it to us along with payment through bank transfer. The details for Bank Transfer are as follows:

Beneficiary Name: Biotech Consortium India Limited Account Number : 00032320008527 IFSC Code: HDFC0000003 (HDFC Bank Limited)

#### **Cancellation/Refund Policy**

Registration cancellations must be made in writing and received by BCIL no later than September 1, 2017. Cancellations received by this date are subject to a 20% processing fee. Registration and ticketed event cancellations received after September 1, 2017, are NOT subject to a refund.

| Registration forms should be sent to:                     |
|---|
| Dr. Vibha Ahuja, Chief General Manager                    |
| Biotech Consortium India Limited (BCIL)                   |
| Anuvrat Bhawan, 5th Floor, 210, Deen Dayal Upadhyaya Marg |
| New Delhi, India - 110 002                                |
| Telephone Number +91-11-23219064-67 (Ext. 204; 205);      |
| 23219059(D)   |
| Fax Number +91-11-23219063                                |

Email: vibhaahuja@biotech.co.in; vibhaahuja.bcil@nic.in