



Biosafety Unit

# ICGEB and its Biosafety Programmes

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Biosafety Unit

## Developing knowledge

**International Centre for Genetic Engineering and Biotechnology**  
**A centre of excellence for research and training in genetic engineering and biotechnology with regard to the needs of developing world**



Biosafety Unit

## ICGEB

The **International Centre for Genetic Engineering & Biotechnology (ICGEB)** is an international organisation dedicated to advanced research and training in molecular biology and biotechnology, with special regard to the needs of the developing world

It comprises 3 components:



ICGEB - Trieste



ICGEB - New Delhi



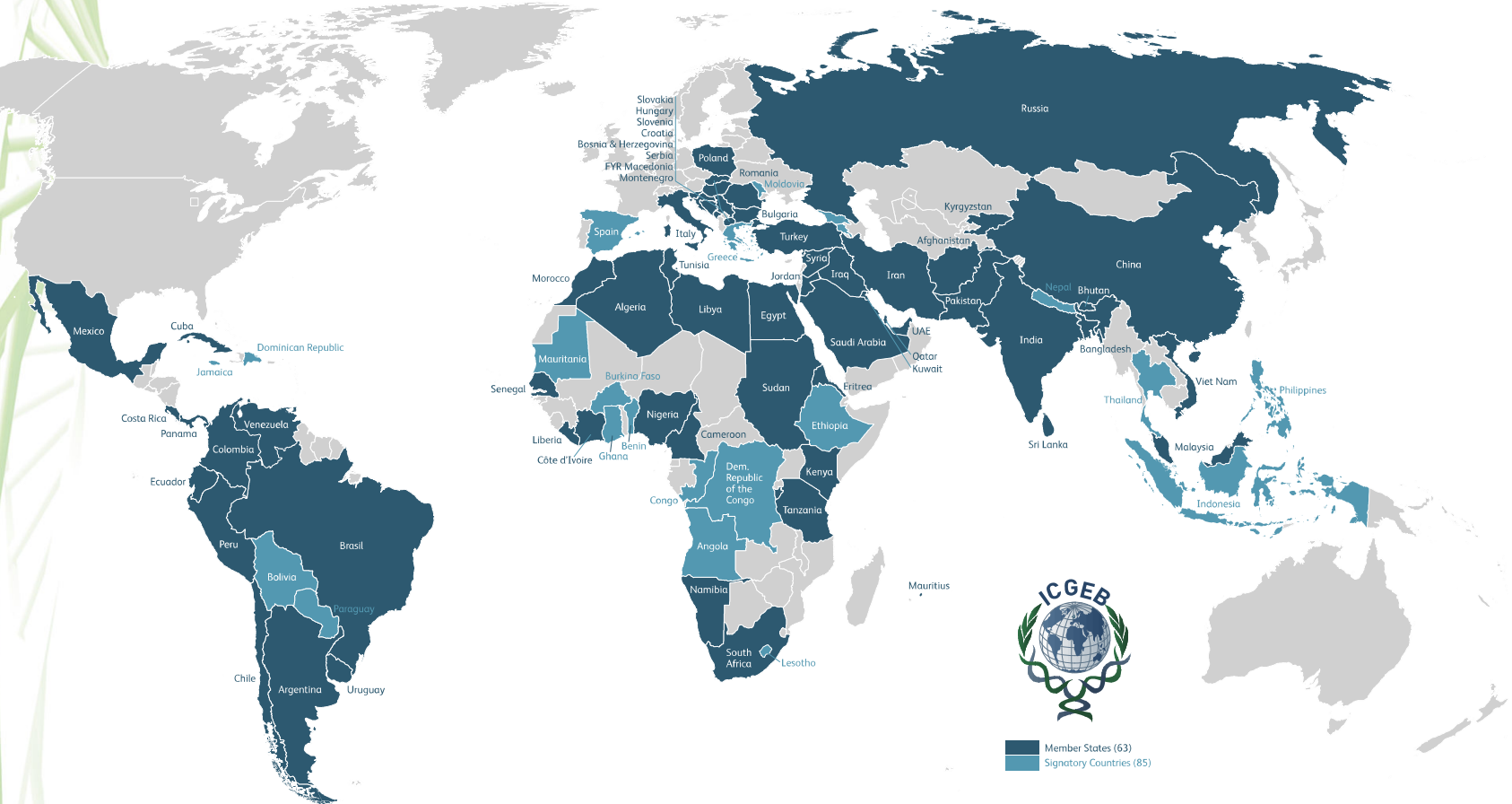
ICGEB - Cape Town



Biosafety Unit

# The ICGEB Constituency

63 Member States  
85 Signatory Countries



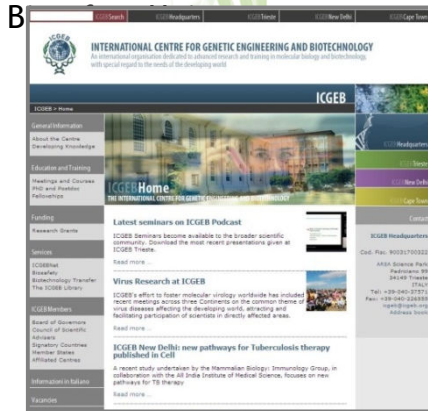
**One Centre: three Components and a Network of  
Affiliated Centres in Member States**



# ICGEB

The **ICGEB** strengthens the research capability of its members through training and funding programmes and advisory services, and represents a comprehensive approach to promoting biotechnology internationally

*ICGEB promotes the safe use of biotechnology*



[www.icgeb.org](http://www.icgeb.org)

## Research and Development Focus

### Human Health

*Basic and applied research in infectious diseases and the genetic component of tumors and cardiovascular pathologies*

### Crop improvement

*Biotic and abiotic stress, plant transformation, insect resistance, biopesticides*

### Biosafety risk assessment

**Technology development and transfer**

**Cooperation with other UN bodies**





# How does ICGEB develop knowledge?

Biosafety Unit

<http://www.icgeb.org/research-groups.html>

<p><b>INTERNATIONAL CENTRE FOR GENETIC ENGINEERING AND BIOTECHNOLOGY</b> An international organisation dedicated to advanced research and training in molecular biology and biotechnology, with special regard to the needs of the developing world.</p>	
<p><b>ICGEB Trieste</b></p>	
<p><b>General Information</b></p> <p>About the Centre Developing Knowledge</p> <p><b>Education and Training</b></p> <p>Meetings and Courses PhD and Postdoc Fellowships</p> <p><b>Funding</b></p> <p>Research Grants</p> <p><b>Services</b></p> <p>ICGEBnet Biosafety Biotechnology Transfer The ICGEB Library</p> <p><b>ICGEB Members</b></p> <p>Board of Governors Council of Scientific Advisors Signatory Countries Member States Affiliated Centres</p> <p><b>Information in Italiano</b></p> <p><b>Vacancies</b></p>	<p><b>Research Groups</b></p> <p><b>Research Groups</b></p> <p>Vittorio Venturi Sergio G. Trnkevitzky Regina Bernuzzi Alessandro Vindigni Franco Pagani Arturo Falaschi Oscar Burroni Mauro Giacca Francesco E. Baralle Alessandro Marcello Andrés F. Muro Fabian Pequin Michael S. Myers Sándor Pongor Laurence Banica Carlo V. Bruschi</p> <p><b>ICGEB Trieste</b></p> <p>Cod. Fisc. 90031700322</p> <p>AREA Science Park Padriciano 99 34149 Trieste ITALY Tel. +39-040-37571 Fax +39-040-229555 icgeb@icgeb.org Address book</p>

- Research projects
- Long term training
- Short term training
- Collaborative research programme
- Cooperation with industrial sector
- Scientific services
- Institutional services

<http://www.icgeb.org/fellowships.html>

<p><b>INTERNATIONAL CENTRE FOR GENETIC ENGINEERING AND BIOTECHNOLOGY</b> An international organisation dedicated to advanced research and training in molecular biology and biotechnology, with special regard to the needs of the developing world.</p>	
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<p><b>General Information</b></p> <p>About the Centre Developing Knowledge</p> <p><b>Education and Training</b></p> <p>Meetings and Courses PhD and Postdoc Fellowships Additional Fellowships</p> <p><b>Funding</b></p> <p>Research Grants</p> <p><b>Services</b></p> <p>ICGEBnet Biosafety Biotechnology Transfer The ICGEB Library</p> <p><b>ICGEB Members</b></p> <p>Board of Governors Council of Scientific Advisors</p>	<p><b>Education and Training</b></p> <p><b>Fellowship Programmes</b></p> <p>Long- and short-term fellowships are available to assist in the training of scientists from ICGEB Member States through the following actions:</p> <p>the doctoral fellowships and International PhD Programmes. ICGEB offers postgraduate studies with the aim of obtaining the "Doctor Philosophiae" (PhD) degree in molecular genetics and molecular biology. The degree can be awarded by a number of validating entities of national and international level, such as the Open University, UK; the "Scuola Normale Superiore" SNS, Pisa, Italy; the University of Nova Gorica, Slovenia; the Javanahat Heras University, New Delhi, India and the University of Cape Town, South Africa.</p> <p>Postdoctoral Fellowships: Scientists may apply for postdoctoral fellowship to be carried out at one of the Components. Successful candidates may be eligible for follow-up funding for their research upon their return to the home institute through the "Institium Grant Programme".</p> <p>Flexible Fellowships: Short-term fellowships to be awarded for ongoing collaborative research between scientists from ICGEB Member States and the research groups at the ICGEB Laboratories in Trieste, New Delhi and Cape Town. The "Sandwich" PhD Programme offers funding opportunities for PhD registered students wishing to carry out part of their experimental studies at the ICGEB Laboratories in the framework of an agreed collaboration.</p>

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<p><b>ICGEB Headquarters</b></p>	
<p><b>General Information</b></p> <p>About the Centre Developing Knowledge</p> <p><b>Education and Training</b></p> <p>Meetings and Courses - Statistics</p> <p><b>Meetings and Courses held at ICGEB Components</b></p> <p><b>Information for interested participants</b></p> <p>Admittance to each event is limited and subject to selection. It is essential that applicants complete and submit the <b>Participation Form</b> (see below, for selected countries) and available in pdf and word (format 1 and format 2), together with a short curriculum vitae and a list of publications (if any), to the relevant contact address indicated on the annual calendar. Documents can be submitted by e-mail or fax and must arrive on or before the set deadline.</p> <p><b>Nationals of ICGEB Member States</b> are eligible to apply for participation on an ICGEB grant to cover accommodation (two share) and local hospitality for the duration of the course; travel is normally not funded. There is generally no registration fee.</p> <p>Further information on each individual course/meeting is provided on the relevant annual poster.</p> <p><b>Information for prospective meeting/course organisers - Application Form</b></p> <p>The Application Form (for reference in word or pdf document) is to be used to submit a proposal for a meeting/course to be held in Trieste, Italy.</p> <p><b>Meetings and Courses held in ICGEB Member States</b></p> <p>Meetings and Courses in ICGEB Member States</p>	<p><b>Research Groups</b></p> <p>Publications and Patents</p> <p>How to reach us</p> <p><b>ICGEB Headquarters</b></p> <p>Cod. Fisc. 90031700322</p> <p>AREA Science Park Padriciano 99 34149 Trieste ITALY Tel. +39-040-37571 Fax +39-040-229555 icgeb@icgeb.org Address book</p>

<http://www.icgeb.org/meetings-and-courses.html>

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<p><b>General Information</b></p> <p>About the Centre Developing Knowledge</p> <p><b>Education and Training</b></p> <p>Meetings and Courses PhD and Postdoc Fellowships</p> <p><b>Funding</b></p> <p>Research Grants Research Grants Impact ICGEB-TWAS UNESCO_IBSP Joint Project</p> <p><b>Services</b></p> <p>ICGEBnet Biosafety Biotechnology Transfer The ICGEB Library</p>	<p><b>Funding</b></p> <p>Funding opportunities are made available through the Collaborative Research Programme (CRP) - ICGEB Research Grants, which is a unique source of funding aimed at financing those projects addressing original scientific questions that show a potential contribution of particular relevance for the applicant's country.</p> <p>Established in 1988, the programme aims to stimulate collaborative research in Member States facilitating the creation of appropriate research facilities in promising institutes, to promote training of young scientists and develop new research programmes of specific interest in participating countries.</p> <p>Support is available for research projects in many fields of basic science, human healthcare, industrial and agricultural biotechnology, and environmental bioremediation. A call for applications is launched yearly.</p> <p><b>ELIGIBILITY</b></p> <p>Applicants for research grant proposals (identified as "CRPs") should hold positions at Universities or Research Institutes in any of the Member States listed in the Annex A of the application form.</p> <p>The maximum number of project proposals that may be submitted by each country is three (3).</p> <p>Project proposals must be submitted by the Principal Investigator (PI) in English, in original with one double-sided copy, duly endorsed by the ICGEB Liaison Officer. Forms biotechnology without the necessary signatures and endorsement will not be considered. Active collaboration with ICGEB Research Groups is welcome but it is not mandatory to apply for funding.</p> <p>Investigating groups do not qualify for submission of applications:</p>

<http://www.icgeb.org/research-grants.html>



Biosafety Unit

## ICGEB Biosafety Unit (BU)

Formed in 1997, the role of the ICGEB Biosafety Unit is to:

- **disseminate** as widely as possible **significant information** related to the biosafety issues raised through the use of products derived from modern biotechnology,
- as well as to **assist its Member States in their capacity** to identify, regulate, manage, and monitor those products within their own Countries



[www.icgeb.org/biosafety](http://www.icgeb.org/biosafety)

### How is this carried out?



Biosafety Unit

## Strengthening the Role of Science in the Decision-making of Biotech Products

The activities of the ICGEB Biosafety Unit are a fully inter-locking package:

✿ *Providing greater access to current scientific information (dissemination of information),*

✿ *Providing training in how to make best use of these data (capacity building - personnel), and*

✿ *Assisting the identification of local gaps in information [required by the regulatory process but not already addressed by the scientific community] and help fill them (capacity building - local assistance)*



[www.icgeb.org/biosafety](http://www.icgeb.org/biosafety)





Biosafety Unit



[www.icgeb.org/biosafety](http://www.icgeb.org/biosafety)

## Dissemination of information

### ✿ Biosafety Webpages

- ❖ Offer access to ICGEB publications and ICGEB databases, as well as useful biosafety information and links
- ❖ Undergoing an up-date...



Biosafety Unit

## Dissemination of information



<http://bibliosafety.icgeb.org>

### ✿ **Bi[bli]osafety** - The Biosafety Bibliographic Database

- ❖ Also used as a training tool
- ❖ Covers scientific and technical topics underpinning GMO decision-making
- ❖ Inter-operable with the CBD central portal

To receive free monthly up-dates, Email...

**Biosafety-data-join@icgeb.org**



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accessibility contact statistics

bibliographic db quick search

advanced search

INTERNATIONAL CENTRE FOR GENETIC ENGINEERING AND BIOTECHNOLOGY  
for international organizations dedicated to advanced research and training in molecular biology and biotechnology  
with special regard to the needs of the developing world

bio  
Biosafety  
Workshop

source: Euphytica Ghosh, K. - Visser, R. G. F. -, 164, (3), p.853-880, 2008, Springer Science + Business Media, Dordrecht, Netherlands, 0014-2336

authors: Craig, W.  
Tepfer, M.  
Degrassi, G.  
Ripandelli, D.

An overview of general features of risk assessments of genetically modified crops.

The intentional introduction into the environment or market of genetically modified organisms (GMOs) is nearly always governed by a framework of science-based risk assessment and risk management measures. This is usually implemented through the integration of hazard identification and characterisation of all of the elements of risk associated with a new GM crop or derived product. Typical categories of hazards arising from the introduction of transgenic crops include: possible unintended negative health effects in a susceptible subgroup of the consumer (target) population; the evolution of resistance in target pests or pathogens; possible unintended negative effects on non-target organisms; non-target hazards associated directly or indirectly with the transgene or transgene products such as the ones associated with the integration and subsequent expression of the transgene in a different organism or species following gene flow. The consequences of wider exposure to these and other hazards are considered in this introduction to the main issues raised when evaluating the possible risks arising from the importation or cultivation of genetically modified crops.

accession number: 20093001606

URL: <http://springerlink.metapress.com/link.asp?id=102881>

DOI: [10.1007/s10681-007-9643-8](https://doi.org/10.1007/s10681-007-9643-8)

descriptors: cultivation; gene flow; genetic engineering; genetic transformation; genetically engineered organisms; hazards; health; identification; pathogens; resistance; risk assessment; transgenic plants; transgenics

risk categories: Animal and human health; Environment; Agriculture; General concerns

Email address(es): [craig@icgeb.org](mailto:craig@icgeb.org)

correspondent address(es): Biosafety Unit, International Centre for Genetic Engineering and Biotechnology (ICGEB), Area Science Park, Padriciano, 99, 34012 Trieste, Italy.

Link to online article

Author Email

**Risks for animal and human health:**  
toxicity & food/feed quality/safety; allergies; pathogen drug resistance (antibiotic resistance), impact of selectable marker

**Risks for the environment:**  
persistence of gene or transgene (volunteers, increased fitness of GM crop, invasiveness) or of transgene products (accumulative effects); susceptibility of non-target organisms; change in use of chemicals in agriculture; unpredictable gene expression or transgene instability (gene silencing); environmentally-induced (abiotic) changes in transgene expression; ecological fitness; changes to biodiversity (interference of tri-trophic interactions); impact on soil fertility/soil degradation of organic material

**Horizontal gene transfer:**  
genetic pollution through pollen or seed dispersal & horizontal gene transfer (transgene or promoter dispersion); transfer of foreign gene to micro-organisms (DNA uptake) or generation of new live viruses by recombination (transcapsidation, complementation, etc.)

**Risks for agriculture:**  
resistance/tolerance of target organisms; weeds or superweeds; alteration of nutritional value (attractiveness of the organism to pests); change in cost of agriculture; pest/weed management; unpredictable variation in active product availability; loss of familiarity/changes in agricultural practise

**General concerns:**  
detection and analytical methods; ethical issues (eg. labelling); substantial equivalence; risk assessment/ risk management; general biosafety; public attitudes, perception; legislation (incl. liability & redress); monitoring; socio-economics (eg. situation of poor farmers in developing countries); IPR (Intellectual Property Rights); GM traceability / commodity segregation

Risk categories





## Welcome to the BCH

The Biosafety Clearing-House (BCH) provides a platform for the exchange of information on Living Modified Organisms (LMOs) under the Protocol. Global access to this information is provided in all 6 of the UN languages.

BCH account holders can create and manage their own (Registering Information) section.

### Latest news

- 2012-04-07 [Malaysia - 3rd National Biosafety \(BCH\) Training Workshop, April 2012...](#)
- 2012-04-03 [Primer Taller de Capacitación Panamá – UNEP-GEF...](#)
- 2012-03-30 [Panama - Oficina del IICA videoconferencia...](#)
- 2012-03-30 [Panama - Traspaso de la Presidencia de la Comisión Nacional de Bioseguridad de Panamá...](#)
- 2012-03-26 [Central African Republic - Les ateliers de formation BCH en République centrafricaine...](#)

[More news...](#)

### Finding Information

- National Contacts
- Laws and Regulations
- Country's Decisions and other Communications
- Roster of Experts
- LMOs, Genes or Organisms
- National Reports
- Capacity-Building Organizations
- The BCH Virtual Library
- Advanced Search --

### Compiled Information

- National Contacts
- LMO Registry
- Organism Registry
- Gene Registry

[Cartagena Protocol on Biosafety](#) to facilitate the exchange of information between the Parties to better comply with their obligations under the Protocol. Environmental, legal and capacity building information

Registering information through the [Management Centre](#) (Registering Information)

### Additions [\[More additions...\]](#)

- 10 [Trinidad and Tobago - National Focal Point](#)
- 10 [Malaysia - Country's Decision or any other Communication](#)
- 10 [Malaysia - Country's Decision or any other Communication](#)
- 10 [Malaysia - Risk Assessment](#)
- 2012-04-10 [Malaysia - Risk Assessment](#)

### Latest updates

- 2012-04-10 [Papua New Guinea - National Focal Point](#)
- 2012-04-10 [Spain - Law, Regulation or Guideline](#)
- 2012-04-10 [Spain - Country's Decision or any other Communication](#)
- 2012-04-10 [Malta - Law, Regulation or Guideline](#)
- 2012-04-10 [Viet Nam - Law, Regulation or Guideline](#)

### Second National Report

on the Implementation of the Cartagena Protocol

— RESULTS —

### Open-ended Online Expert Forum on

Risk Assessment and Risk Management

### Online Forum on Capacity-Building

DETECTION & IDENTIFICATION LABORATORY NETWORK

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## Dissemination of information

The Risk Assessment Searching Mechanism (RASM) is a comprehensive collection of online Risk Assessment documents related to official...  
This search tool enables you to find content on the site by specifying one or more search terms.  
Remember that you can use the search engine, it's normally good enough, the search here is just if you want to be more specific.

**Taxonomical classification**

Identifier:

Responsible authority of the risk assessment:

Country:

Year:

Date:

<http://rasm.icgeb.org>

### Risk Assessment Search Mechanism (RASM)



- ❖ Provides on-line access to scientific risk assessment documentation relevant to the commercialisation of GM crops world-wide
- ❖ Currently contains ~1200 records of 160 transgenic events and 21 plant species



search expressions how-to

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advanced search

Determination of the Safety of Monsanto's Corn MON 863 (Insect-Resistant Corn) for Direct Use as Food, Feed and for Processing  
[Go to document](#)

ICGEB identifier:	853
Organism:	Corn / Maize
Trait:	Coleopteran insect resistance (Bt-toxin)
Gene(s):	cry3Bb1 from <i>Bacillus thuringiensis</i> subsp. <i>kumamotoensis</i> npt II (neomycin phosphotransferase II) from <i>E. coli</i>
Unique identifier:	MON-00863-5 <a href="#">link</a>
Developer:	Monsanto
Product code:	MON 863
Document author:	Philippines Bureau of Plant Industry
Country:	Philippines
Year:	2008

Link to RA Document

Determination of the Safety of Monsanto's  
Corn MON 863 (Insect-Resistant Corn)  
for Direct Use as Food, Feed and for Processing

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**Food and Feed Safety:**

The product dossier on Corn MON 863 were reviewed for safety and nutritional differences compared with the conventional corn. The focus of the review was on any new or altered expression trait and changes in composition and nutritional content or value relative to the conventional corn. At the end of the safety assessment, a conclusion was made that the corn event MON 863 is as safe as the conventional corn taking into account dietary impact of any changes in nutritional content or value.

A biosafety permit for Corn MON 863 and all progenies derived from crosses of the product with any conventionally-bred corn and corn containing approved-biotech events for direct use as food, feed and for processing were issued to Monsanto Philippines Inc. on October 7, 2003. The permit is valid for five years and shall expire on October 6, 2008 subject to the terms and conditions set forth in DA Administrative Order No. 8, Series of 2002. The said corn event (MON 863) was included in the Lists of Approval Registry (Delisting) being prepared by the Department of Agriculture-Bureau of Plant Industry.

*This approval is for Direct use as Food, Feed and for Processing only. This does not include cultivation of Insect Resistant Corn MON 863 in the Philippines. Food, Feed and use of its by-products is therefore authorized as of October 7, 2003. The biosafety permit (No.03-085) stated that "Insect-Resistant (rootworm) Corn MON 863 is as safe for human food, livestock feed and for processing as its conventional counterparts".*

**I. Brief Identification of the Genetically Modified Organism (Living Modified Organism)**

**Designation:** Corn MON 863

**Applicant:** MONSANTO PHILIPPINES, INC.  
7<sup>th</sup> Floor, Ayala-FGU Center  
Alabang-Zapote Rd. cor Acacia Avenue  
Madrigal Business Park  
Alabang 1770, Muntinlupa City  
Philippines

**Plant Species:**

**Name:** Corn (*Zea mays* L.)

**Parent Material:** Inbred line of corn A634

**Center of Origin:** Mexico, Central America and South America

site map accessibility contact statistics

search expressions how-to

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advanced search

Monsanto's Corn MON 863 (Insect-Resistant Corn) for Direct Use as Food, Feed and for Processing

MON-00863-5

Corn / Maize

Coleopteran insect resistance (Bt-toxin)

cry3Bb1 from *Bacillus thuringiensis* subsp. *kumamotoensis*  
npt II (neomycin phosphotransferase II) from *E. coli* [link](#)

MON-00863-5 [link](#)

Monsanto

**Link to EMBL Database**

Product code:  
Document author:  
Country:  
Year:

MON 863  
Philippines Bureau of Plant Industry  
Philippines  
2008

site map accessibility contact statistics

search expressions how-to

Search input field with search button

advanced search

Determination of the  
[Go to document](#)

ICGEB identifier:

Organism:

Trait:

Gene(s):

Unique identifier:

Developer:

Product code:

Document author:

Country:

Year:

Product Database

Home page

Disclaimer

Show by

Unique identifier

Organism

Company

Country

MON-00863-5	MON 863
Transformation Event	Yield Gard Rootworm Corn
Trade Name	MON863
Applicant	MONSANTO
Organism Common Name	Corn
Organism Scientific Name	Zea mays
Centre of Origin and Diversity	<a href="#">Biodiversity Conservation Document on MON863</a>
Food and Feed Safety Issues	<a href="#">Comprehension considerations for MON863</a>
Methods for safe handling	
Additional information	
Traits	Colecterol resistance Kanamycin resistance npt II
Genes	neomycin phosphotransferase II (npt II)

Canada					
Date of approval	Type of use	Authority	Decision	Risk assessment	
March 05, 2002	Feed	Canadian Food Inspection Agency - Feed Section	2002002-05		
March 02, 2002	Food	Health Canada - Food Safety and Inspection Agency	2002002-02		
March 02, 2002	Unconfined Planting	Canadian Food Inspection Agency - Plant Inspection Office	2002002-02		

European Community					
Date of approval	Type of use	Authority	Decision	Risk assessment	
August 10, 2002	Feed	European Commission	2002/156/EC		
January 12, 2002	Food	European Commission	2002/156/EC		

Japan					
Date of approval	Type of use	Authority	Decision	Risk assessment	
February 25, 2002	Feed	Ministry of Agriculture, Forestry and Fisheries (MAFF)			
February 21, 2002	Food	Ministry of Health, Labour and Welfare (MHLW)			
June 01, 2004	Unconfined Planting	Ministry of Agriculture, Forestry and Fisheries and Ministry of the Environment	2004-06-01		

Mexico					
Date of approval	Type of use	Authority	Decision	Risk assessment	
October 07, 2002	Food	Sanitary Services and Regulations Directorate (Secretary of Health)			

United States of America					
Date of approval	Type of use	Authority	Decision	Risk assessment	
October 25, 2002	Unconfined Planting	Department of Agriculture (USDA)	2002-10-25		
February 24, 2002	Biopesticide	Environmental Protection Agency (EPA)	2002-02-24		
December 21, 2001	Food and Feed	Food and Drug Administration (FDA)	2001-12-21		

Republic of Korea					
Date of approval	Type of use	Authority	Decision	Risk assessment	
September 17, 2004	Feed	Rural Development Administration (RDA)			
September 20, 2002	Food	Food and Drug Administration (KFDA)			
September 17, 2004	Processing	Rural Development Administration (RDA)			

Concept: corn insect resistance (Bt-toxin)

cry3Bb1 from *Bacillus thuringiensis* subsp. *kumamotoensis*  
npt II (neomycin phosphotransferase II) from *E. coli* [link](#)

MON-00863-5 [link](#)

Monsanto

MON 863

Philippines Bureau of Plant Industry

Philippines

2008

and for Processing

Link to OECD record





Biosafety Unit

## Dissemination of information

### ❁ Collection of Biosafety Reviews



- ❖ Annual compilation of scientific studies on biosafety and risk assessment, summarising the present status of specific fields of biosafety expertise
- ❖ Volume VIII just published, covering:
  - GMO Regulation
  - Problem Formulation in GM Food/Feed Evaluation
  - GMO Product Stewardship



[www.icgeb.org/biosafety/publications/collections.html](http://www.icgeb.org/biosafety/publications/collections.html)





Biosafety Unit



#### BIOSAFETY WEB PAGES

- Home Page
  - Introduction to Biosafety Databases
  - Biosafety in Member States
  - Library
  - News
  - In House Publications
    - Collection of Biosafety Reviews
    - In house articles
    - External Publications
    - ICGEB Biosafety News
  - Training
- ICGEB Biosafety Unit  
Padriciano, 99  
34149 Trieste, Italy  
Tel.: +39-040-3757320  
Fax: +39-040-226555  
Email: biosaf@icgeb.org

## Publications

### Collection of Biosafety Reviews

The ICGEB Biosafety Unit, in the framework of its collaboration with the Italian Ministry for the Environment, publishes the "Collection of Biosafety Reviews", a compilation of scientific studies on areas of major interest for biosafety and risk assessment, prepared by internationally recognized scientists summarising the state of the art in their field of expertise.

### Volumes



Volume 1



Volume 2



Volume 3



Volume 4



Volume 5



Volume 6



Volume 7



Volume 8

<http://www.icgeb.org/biosafety/publications/collections.html>





Biosafety Unit



## Capacity building - Individual level

### ✿ ICGEB supported workshops - 2012

- ❖ BSF-2012: Advanced biosafety course - ICGEB, Italy, April  
*"Problem Formulation: A Strategic Approach to Risk Assessment of GMOs"*
- ❖ Regional workshop: Colombo, Sri Lanka, May  
*"Biosafety of Genetically Engineered Crops: Best Practices from Laboratory to Farmer's Fields"*

### ✿ ICGEB supported workshops - 2013

- ❖ Regional workshop: Doha, Qatar, January  
*"Detection of GMOs in Food and Agricultural Products"*
- ❖ BSF-2013: Advanced biosafety course - ICGEB, Italy, July  
*"Strategic Approaches in the Evaluation of the Science Underpinning GMO Regulatory Decision-making"*

### ✿ Biosafety Fellowships

- ❖ The BU has hosted a series of Biosafety Fellows over the years, providing them with vital *on the job* training. The current fellow started in Nov 2011.



Biosafety Unit

# Capacity building - Institutional level



## • Construction of Italian Biosafety Clearing House

<http://bch.minambiente.it/>

- ❖ The Italian government is obliged to provide GMO information (eg via a BCH) to the public, under the Cartagena Protocol on Biosafety and EU Legislative Decree 224 (taking in Directive 2001/18/CE)

MINISTRY FOR ENVIRONMENT AND TERRITORY AND SEA  
Direction for Nature Protection

**ITALIAN BIOSAFETY CLEARING HOUSE**

Homepage > EN > Welcome!

**Sections**

- Presentation
- Legislation
- Biosafety
- GMO doc. and decisions
- Clearing House

**The Cartagena Protocol and the Biosafety Clearing-House on Biosafety (BCH)**

Adopted in January 2000, the Protocol entered into force in September 2003 and was ratified by Italy in March 2004. The objective of the Protocol is to ensure an adequate protection in the field of the use of Living Modified Organisms (LMOs) resulting from modern biotechnology, which may have adverse effects on biodiversity and human health. The provisions of the Protocol are in accordance with the precautionary approach contained in Principle 15 of the Rio declaration.

To support the exchange of information in biosafety the Protocol established the Biosafety Clearing-House with the mandate to:

- facilitate sharing of scientific, technical, environmental and legal information on, and experience with, living modified organisms;
- assist Parties to implement the Protocol, taking into account the special needs of developing country Parties and countries with economies in transition;
- inform Parties about the decisions regarding the domestic use and marketing of LMOs as part of the procedure for transboundary movement of LMOs for direct use as food, feed or processing.

**The Italian approach**

The Italian BCH is an information-sharing platform in support to the decision-making process on national biosafety issues which:

- is constructed within the international framework set up by the Convention on Biological Diversity;
- follows the indications of the Aarhus Convention;
- reflects the provisions of the European Community;
- responds to the requirements of the Italian Law on public consultation and access to information;
- supports the development of implementation legislation by the Italian Regional Authorities

**The Italian Biosafety Clearing-House**

The Italian BCH consists of five different sections, comprising:

- A Descriptive section, which provides general information on biosafety issues, including links with relevant Institutions and Organisations;
- A section on biosafety, with the general outlines of the principles for risk assessment and risk management, as well as the link to some informatic tools for biosafety;
- A Legislation section, with a collection of National, Community and International legislative texts relevant for biosafety;
- A section on the use of LMOs, including tools for the information and the participation of the public in the area of the experimental and commercial release of LMOs;
- A BCH sections which performs the information tasks required by the Cartagena Protocol and under the competence of EU Member States as defined by Regulation (EC) 1946/2003.

**The Italian decision-making platform on Biosafety**

The Ministry for the Environment and Territory and Sea is the National Competent Authority and coordinates the administrative and technical and scientific activities on Biosafety.

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Ministry for Environment and Territory and Sea  
Direction for Nature Protection

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Biosafety Unit



## ICGEB Capacity Building Project for sub-Saharan Africa

*To support and expand ongoing efforts in helping governments in Sub-Saharan Africa to develop effective safety and regulatory systems in the field of modern biotechnology*

A US\$6 million 4-year second phase of an ambitious project focusing on improving training, information and other support to regionally-based specialists so that selected African countries have the opportunity to safely access scientific advances

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GRACE is a 3.5 year, EUR 6 million, EU FP7 research project with two key research objectives:

- Assessing health, environmental and socio-economic impacts of GM plants (risks and benefits), and;
- testing various types of animal feeding trials and alternative in-vitro methods for health risk assessments of GM food and feed.





Biosafety Unit



13<sup>th</sup>  
**ISBGMO**  
CAPE TOWN SOUTH AFRICA 2014  
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For more information on the 13<sup>th</sup> ISBGMO and **Sponsorship Opportunities**, please visit: <http://isbr.info/ISBGMO13>

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Biosafety Unit

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