

Biosafety Clearing-House and the Network of Laboratories

*2nd International Workshop of GMO Analysis Networking
21-23 July 2015, Varese, Italy*

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Biosafety Clearing-House

Cartagena Protocol on Biosafety – Convention on Biological Diversity

Biosafety Clearing-House Convention on Biological Diversity

Home The BCH The Protocol Finding Information Registering Information Resources Help

Country Profiles...

Welcome to the BCH Central Portal

The Biosafety Clearing-House (BCH) is a mechanism set up by the Cartagena Protocol on Biosafety to facilitate the exchange of information on Living Modified Organisms (LMOs) and assist the Parties to better comply with their obligations under the Protocol. Global access to a variety of scientific, technical, environmental, legal and capacity building information is provided in the six official languages of the UN.

BCH account holders can create and manage records in the BCH by signing in through the Management Centre (Registering Information) section.

Latest news

- 2015-05-20 Republic of Korea - LMO Workshop for Bhutan Officials on Biosafety and Safety Management by Korea Biosafety Capacity Building Initiative...
- 2015-04-07 Malaysia - Consultation Workshop for the Final Draft Report of the Study on the Establishment of a Regulatory Framework for Liability and Redress for Damage Caused by LMOs, Kuala Lumpur, Malaysia, 31 March 2015...
- 2015-03-20 Mexico - PARTICIPANTES - SEGUNDO CURSO REGIONAL PARA EL FORTALECIMIENTO DE CAPACIDADES EN BIOSEGURIDAD DE ORGANISMOS GENÉTICAMENTE MODIFICADOS 2015...
- 2015-03-19 Iran (Islamic Republic of) - Theoretical and practical Workshop on BCH Capacity building...
- 2015-03-16 Republic of Korea - Announcement of LMOs Statistics for 2014, Korea...
- 2015-03-10 7th meeting of the IOBC-WPRS working group "GMO's in Integrated Plant Production" in Sofia, 1-3 June 2015...
- 2015-03-07 PERÚ - Simposio Latinoamericano: "Domesticación y manejo de recursos genéticos"...
- 2015-02-23 Guatemala - TALLER DIVERSIDAD GENÉTICA DE MAÍZ EN GUATEMALA: Estado de su conocimiento y su actualización...

More news...

Latest Additions [More additions...]

- 2015-05-21 Republic of Korea - Country's Decision or any other Communication
- 2015-05-21 Republic of Korea - Risk Assessment
- 2015-05-20 Kenya - Submissions from Parties, other Governments or relevant organizations
- 2015-05-20 Philippines - Submissions from Parties, other Governments or relevant organizations
- 2015-05-20 Pakistan - Submissions from Parties, other Governments or relevant organizations

Latest updates

- 2015-05-20 Mexico - National Focal Point
- 2015-05-15 Philippines - National Focal Point
- 2015-05-15 Botswana - National Focal Point
- 2015-05-15 Biosafety Information Resource
- 2015-05-15 Lithuania - Law, Regulation or Guideline

Biodiversity for Sustainable Development
Pyeongchang, Korea 2014
COP-11/MOP-1/INC-10
COP-MOP 7
29 Sep - 3 Oct 2014
Final Report: **NEW**
Ar | En | Es | Fr | Ru | Zh
Webpage | Documents

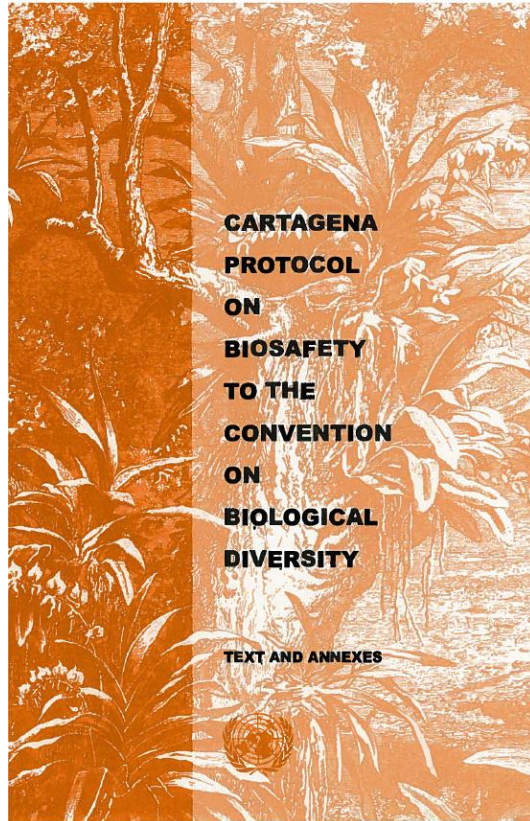
Online discussions
Socio-economic Considerations **NEW**

Open-ended **NEW**
Online Forum on Synthetic Biology

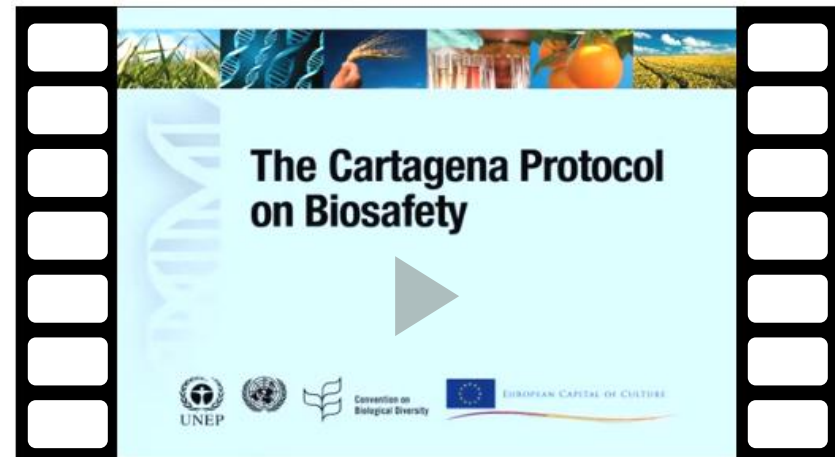
<http://bch.cbd.int>



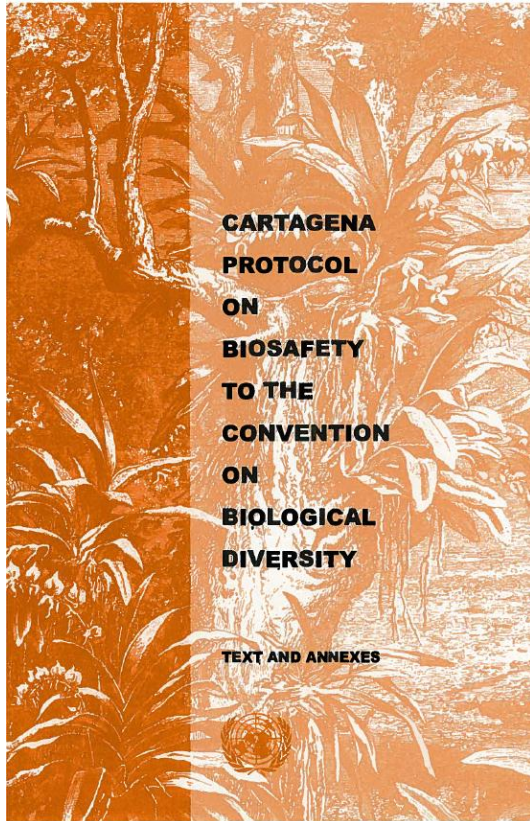
Cartagena Protocol on Biosafety



safe handling, transport and use of living modified organisms (LMOs) that may have adverse effects on biodiversity and human health



Cartagena Protocol on Biosafety









Focal areas of the Strategic Plan (2011-2020):

1. Implementation of biosafety systems
2. Capacity building
3. Compliance and review
4. Information sharing
5. Outreach and cooperation



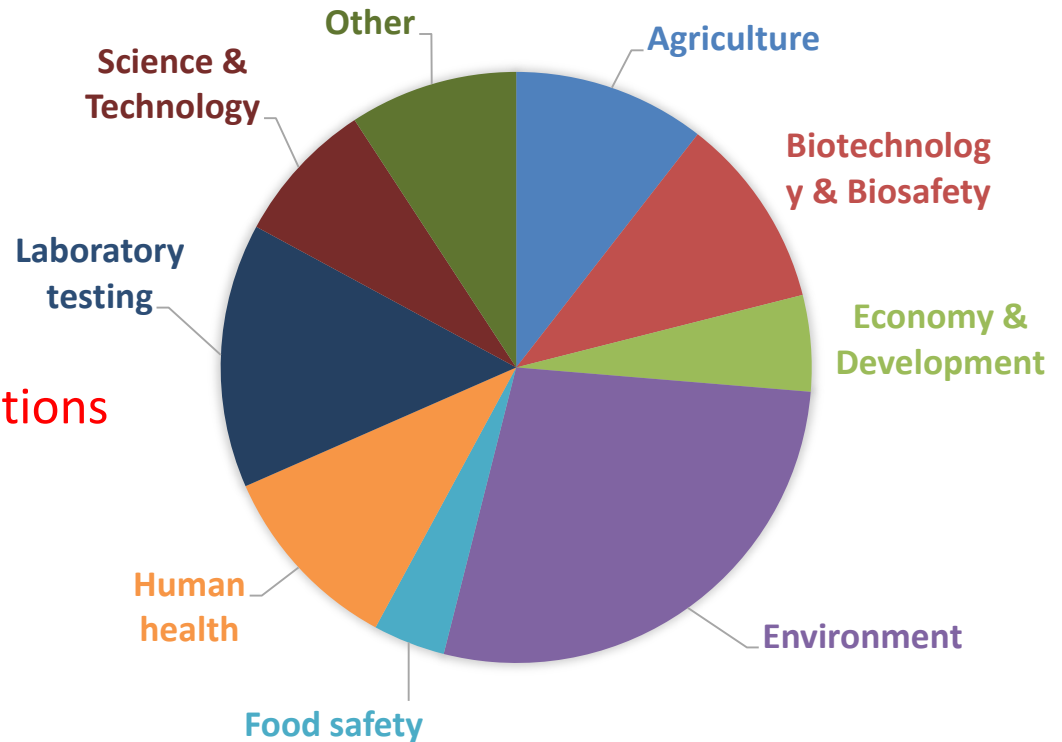
Biosafety Clearing-House

- **Scope:**  Environment –  Human health –  Animal feed –  Processing –  Contained use –  Other
- All types of living modified organisms
- All types of introduction into the environment (e.g. field trials, commercial release)







Biosafety Clearing-House

- 170 Parties
- 300 organizations:
 - ✓ 70 Academic
 - ✓ **76 Governmental institutions**
 - ✓ 60 NGOs
 - ✓ 11 Business & Industry



Biosafety Clearing-House

Who can register information?

	NATIONAL RECORDS (decisions, law, risk assessment*, etc)	REFERENCE RECORDS (LMO, gene, organism, risk assessment**, etc)
National Focal Points		
Registered users		

* Risk assessment generated by regulatory process

** Risk assessment generated by independent or non-regulatory process



Biosafety Clearing-House

Numbers at a glance

National records

- 841 national biosafety contacts
- 826 laws and legislations
- 1265 decisions by 43 countries
- 961 risk assessments
- 157 experts


Reference records

- 374 LMOs
- 417 genetic elements
- 195 organisms
- 420 capacity building initiatives & country needs
- 292 organizations
- 1430 publications



Biosafety Clearing-House

Country Profile

Profile information and status	
Country	Brazil
Date of signature	-
Date of ratification	2003-11-24
Date of entry into force	2004-02-22
Profile revision	-
Profile status	 Published
Profile last updated on	-

Type of document	Number of records
<input type="checkbox"/> Biosafety Expert	17
<input type="checkbox"/> Capacity Building Needs and Priorities	0
<input type="checkbox"/> Competent National Authority	7
<input type="checkbox"/> Country's Decision or any other Communication	45
<input type="checkbox"/> Law, Regulation or Guideline	22
<input type="checkbox"/> National Database or Website	1
<input type="checkbox"/> National Focal Point	2
<input type="checkbox"/> News	0
<input type="checkbox"/> Report on Assignment	0
<input type="checkbox"/> Risk Assessment	42
<input type="checkbox"/> Reports on Implementation of the Protocol	2
Total number of records	138

- ✓ National experts
- ✓ National Authorities
- ✓ Decisions
- ✓ Law & regulations
- ✓ Guidelines
- ✓ National Focal Points
- ✓ Risk Assessment
- ✓ National reports



Biosafety Clearing-House



Modified Organism

MON-00810-6 - YieldGard™ maize

LMO Information

Decisions on the LMO

Risk Assessments

Record information and status

Record ID	14750
Status	Published
Date of creation	2006-06-05 14:39 UTC (kirsty.mclean.consultant@cbd.int)
Date of last update	2013-05-24 18:43 UTC (dina.abdelhakim@cbd.int)

+1 0

Tweet 0

Recommend 2

Living Modified Organism identity

The image below identifies the LMO through its unique identifier, trade name and a link to this page of the BCH. Click on it to download a larger image on your computer. For help on how to use it go to the [LMO quick-links](#) page.



MON-00810-6
YieldGard™ maize



<http://bch.cbd.int/database/record.shtml?documentId=14750>

Read barcode or type above URL into internet browser to access information on this LMO in the Biosafety Clearing-House © SCBD 2012

Biosafety Clearing-House



Modified Organism

MON-ØØ81Ø-6 - YieldGard™ maize

Characteristics of the transformation process

Vector

PV-ZMBK07 and PV-ZMGT10

Techniques used for the modification

- Biolistic / Particle gun

Genetic elements construct

CaMV Enhanced 35S promoter
[#100366](#)
0.61 Kb

Hsp70 intron
[#100359](#)
0.80 Kb

Cry1Ab
[#14985](#)
3.46 Kb

[Further details](#)

Notes regarding the genetic elements introduced or modified in this LMO

The transgenic maize line MON810 was genetically engineered to resist ECB by producing its own insecticide. This line was developed by introducing a synthetic version of the *cry1Ab* gene, isolated from the soil bacterium *Bacillus thuringiensis* (Bt) which was modified to enhance the expression of the Cry1Ab protein in plants, however the resulting amino acid sequence is identical to the native protein.



Biosafety Clearing-House




Modified Organism

MON-ØØ81Ø-6 - YieldGard™ maize

Detection method(s)

External link(s)


 [MON-ØØ81Ø-6 - EU Reference Laboratory for GM Food and Feed \(EURL-GMFF\)](#)


 [MON-ØØ81Ø-6 - CropLife International Detection Methods Database](#)

Additional Information


Other relevant website address or attached documents

 [MON810 - OECD Biotrack Product Database](#)

 [MON810 - CERA GM Database](#)

 [Safety Assessment of YieldGard Insect-Protected Corn Event MON 810](#)

 [BATS \(2003\) Genetically Modified \(GM\) Crops: molecular and regulatory details, v.2.pdf](#)

 [MON810 - Monsanto.pdf](#)

Biosafety Clearing-House



Modified Organism

MON-00810-6 - YieldGard™ maize

LMO Information

Decisions on the LMO



































Risk Assessments

g+1 0

Tweet 0

Recommend 0

Display cross-references with external data

Country	BCH Decisions
Argentina	777        
Australia	7477        
Austria	37308         
Brazil	44584         



Biosafety Clearing-House



Modified Organism


MON-00810-6 - YieldGard™ maize















































LMO Information

Decisions on the LMO

Risk Assessments

Display cross-references with external database(s): **Biotradestatus** ▼

For further information about the external database click on the database name below; to visit the original database page containing information on this LMO click on the  icon beside the database name

Country	BCH Decisions	Biotradestatus 
Argentina	777        	     
Australia	7477        	
Austria	37308        	
Brazil	44584         	     

- Biotradestatus (CropLife International)
- GM Foods Platform (FAO)
- BioTrack Product Database (OECD)



Biosafety Clearing-House



Modified Organism

MON-ØØ81Ø-6 - YieldGard™ maize

LMO Information

Decisions on the LMO

Risk Assessments

g+1

0



Tweet

0



Recommend

0

ID

Description

21 record(s) found



101152

Austria

Risk assessment for GM maize line MON810 which may not be cultivated in Austria

MON-ØØ81Ø-6
Corn, MAIZE



45581

Brazil

Risk Assessment for Insect Resistant Maize

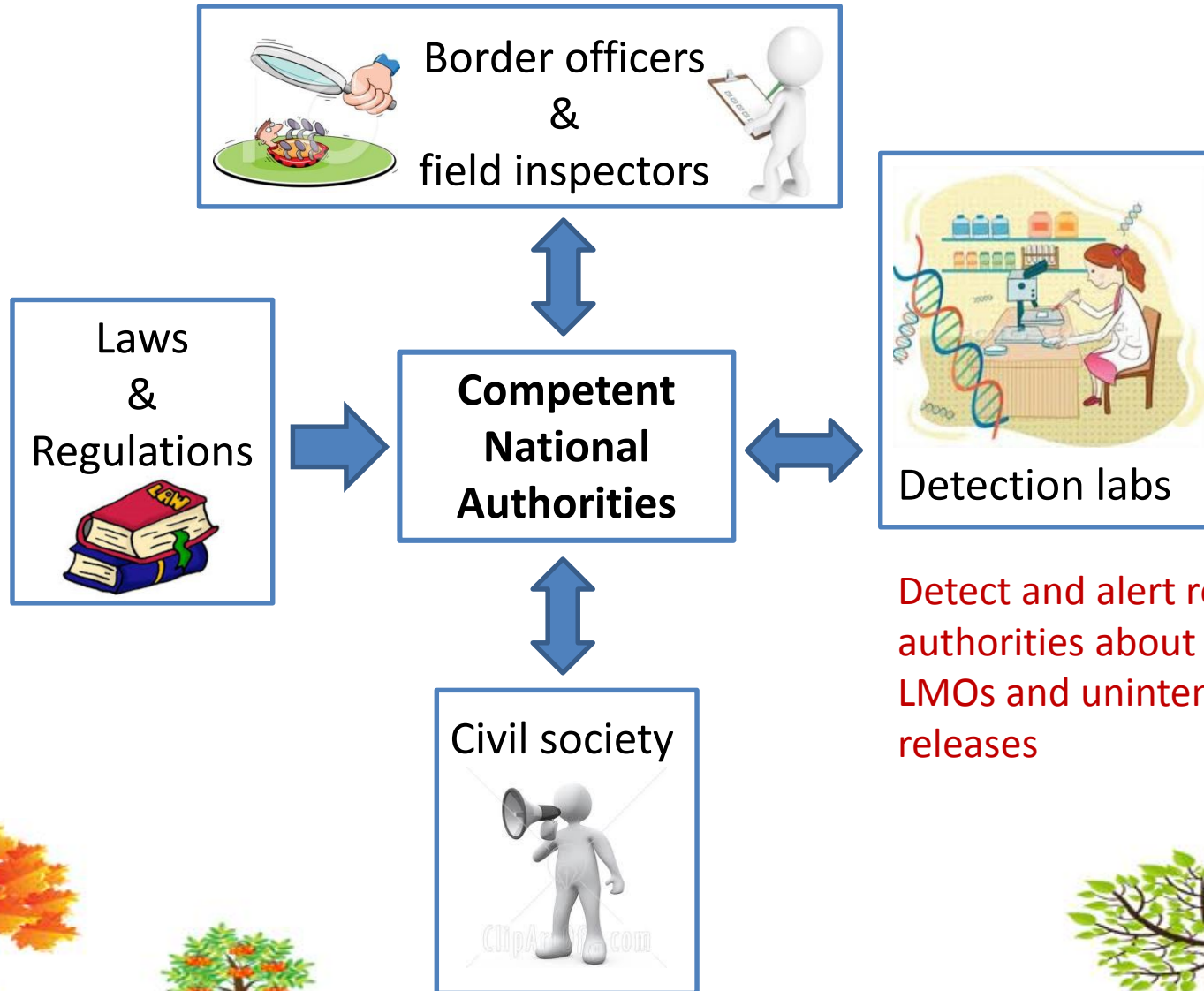
MON-ØØ81Ø-6
Corn, MAIZE



Network of Laboratories



Network of Laboratories



Detect and alert relevant authorities about unauthorized LMOs and unintentional releases



Network of Laboratories



Focal areas of the Strategic Plan (2011-2020):

1. Implementation of biosafety systems
2. Capacity building
3. Compliance and review
4. Information sharing
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Network of Laboratories



Open to all interested participants from LMO detection laboratories

They must be registered in the Network in order to contribute to the online discussions

REGISTER NOW

http://bch.cbd.int/onlineconferences/portal_detection/info_participants.shtml



Network of Laboratories

- ✓ Technical Tools and Guidance for the Detection and Identification of LMOs

http://bch.cbd.int/protocol/cpb_detection/toolsandguidance.shtml



- ✓ Portal for the Sampling, Detection and Identification of LMOs

http://bch.cbd.int/protocol/cpb_detection.shtml

A screenshot of the website for the Convention on Biological Diversity's Cartagena Protocol on Biosafety. The page is titled "Sampling, Detection and Identification". It features a navigation menu at the top with links to "The Convention", "Cartagena Protocol", "Supplementary Protocol", "BCH", and "Secretariat". A search bar is located on the right. The main content area includes a sidebar with a table of contents for "The Cartagena Protocol" and a central text block. The text block discusses the importance of sampling, detection, and identification of LMOs and lists technical tools developed for this purpose. A sidebar on the right contains a "DETECTION & IDENTIFICATION LABORATORY NETWORK" graphic and a "Technical Tools and Guidance for the Detection and Identification of LMOs" graphic. The website footer includes social media icons and a "Country Profiles..." dropdown menu.



Network of Laboratories

COP-MOP-7



Decision BS-VII/10:

- ✓ Positive feedback
- ✓ Support for additional activities of the Network of Laboratories for detection and identification of LMOs
- ✓ Request the SCBD to organize training on sampling, detection and identification of LMOs



Network of Laboratories

Recommendations to COP-MOP-8

*Workshop of the Network of Laboratories for the Detection and Identification of LMOs
9 - 11 June 2015, Ispra, Italy*

- Conduct needs assessment
- Encourage Parties to support laboratories and networks for the detection and identification of LMOs, submit information on methods to the BCH
- Request the SCBD to:
 - i. Continue organizing online discussions of the Network of Laboratories
 - ii. Convene capacity-building activities
 - iii. Improve the user interface of the Technical Tools and Guidance for the Detection and Identification of LMOs
 - iv. Regularly update the Technical Tools and Guidance for the Detection and Identification of LMOs and training materials

