

CROPLIFE INTERNATIONAL DETECTION METHODS DATABASE

**INFORMAL ADVISORY COMMITTEE ON THE BIOSAFETY
CLEARING-HOUSE**

16 May 2023

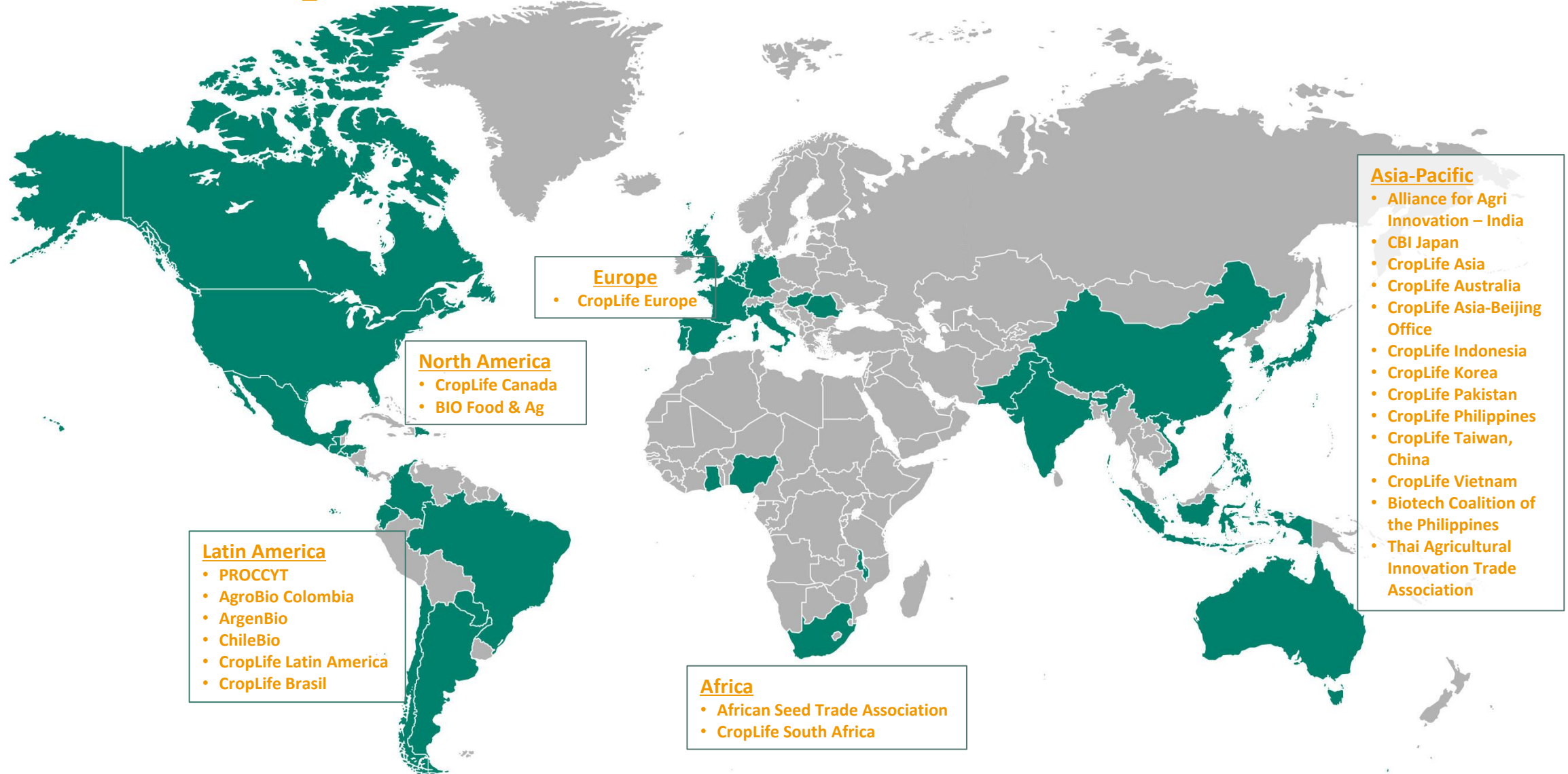
Sarah Lukie (sarah.Lukie@croplife.org)

Member Companies



Plant Biotech Network

24 National & Regional Associations



Biotech Information Sharing

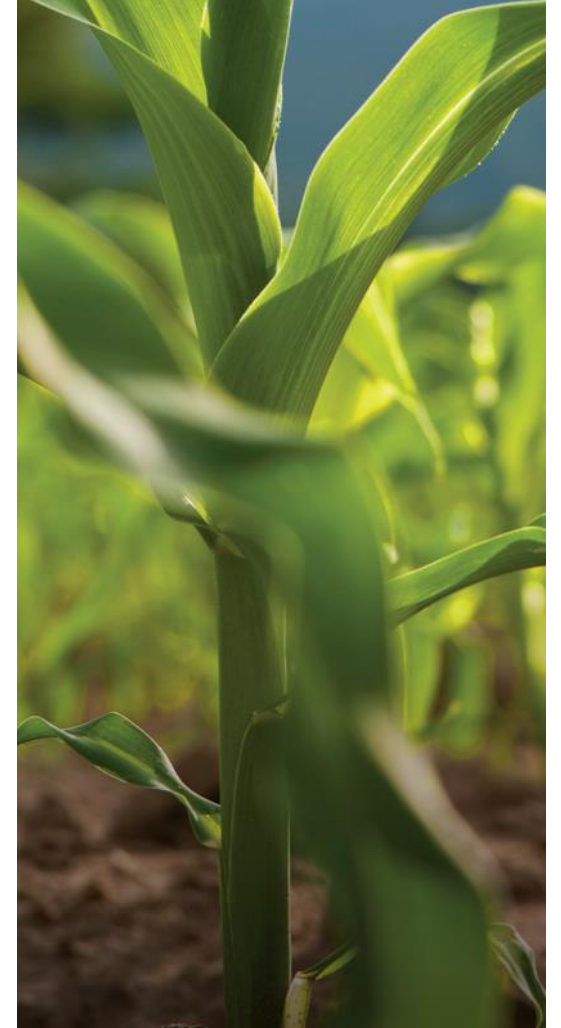


Maintained by CropLife International

- **Detection Methods database** (<https://detection-methods.com/>)
 - Public database of GM detection methods, maintained by CropLife International member companies
 - Interoperable with BCH
- **BiotradeStatus website** (<http://www.biotradestatus.com/>)
 - Public website and database for the Regulatory and Market Status of specific agricultural biotechnology products
 - Linked with BCH
- **AgbioInvestor GM monitor database** (<https://gm.agbioinvestor.com>)
 - Public website with information about GM approvals and planted area
 - Approvals are based on publicly available data
- **CropLife International Benefits database** (<http://biotechbenefits.croplife.org/>)
 - Public website with providing links to peer reviewed, published papers on benefits and safety implications associated with the use of LMOs
 - Developed to support implementation of Article 26 of the Protocol which allows for Parties to consider socio-economic considerations in decision-making on import of LMOs
- **GMOAnswers website** (<http://gmoanswers.com/>)
 - Public website created to provide accurate and validated answers to questions about GMOs
 - Provides easy access to information about GMOs in food and agriculture

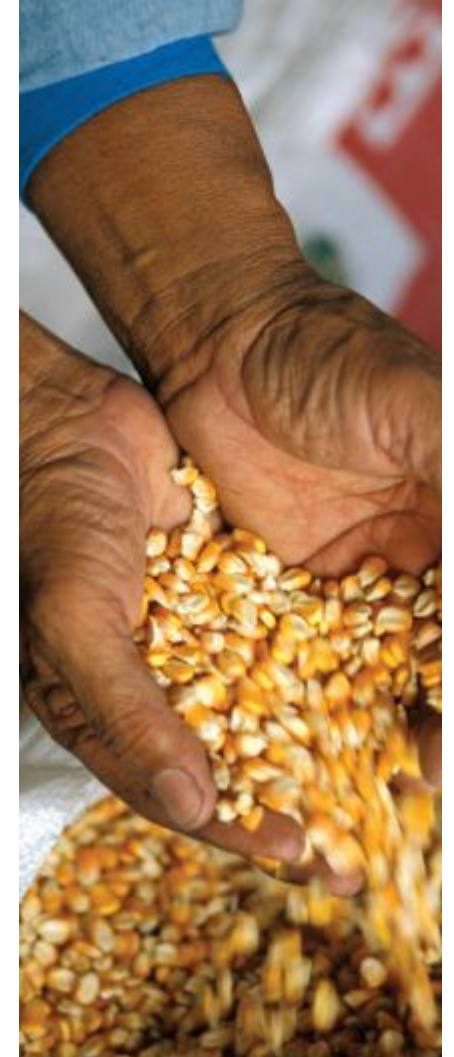
Detection Methods Expert Team

- Encourage international standardization and promote implementation of harmonized, practical and science-based regulations for the development, validation, and utilization of detection methods for GM crops
- Provide technical expertise, develop consensus positions and provide answers to regulatory agencies
- Work together with value chain stakeholders to provide access to diagnostic methods and appropriate reference materials
- Manage and maintain the CropLife Detection Methods Database



Detection Method Database Goals

- Fulfill member company commitment to make detection methods and reference materials available for regulatory requirements, consumer preference and stewardship of our products
- Ensure robust and consistent testing by sharing validated, industry-developed detection methods that are compliant with standardized guidelines
- Facilitate method access to customers and end-users (e.g. regulators, seed companies) to meet their needs (e.g. LLP testing) without specific license agreements
- Provide transparency to downstream stakeholders and governments
- Support global trade and reduce the potential for trade disruptions
- *Publication of methods is typically at the time of commercial sales*



The Detection Methods Homepage

(<https://detection-methods.com/>)



Homepage
Information

A screenshot of the CropLife International Detection Methods Database homepage. The page has a green header with the CropLife International logo and tagline "Meeting challenges in a growing world". Below the header is a navigation bar with links: Home, About Us, Crop Protection, Plant Biotechnology, Resources, and Contact Us. A secondary navigation bar contains links: database home, technology overview, about us, library, and intellectual property. The main content area is titled "The CropLife International Detection Methods Database" and includes a "Background" section, a "The Database" section, and a "Subscribe to new alerts" form. Red circles and arrows highlight specific elements: "database home" in the navigation bar, the "SEARCH THE DATABASE" button, and the "Subscribe to new alerts" form. Annotations on the right side of the image point to these elements with the text "Additional Information", "Click to access database", and "Homepage Information".

CropLife
INTERNATIONAL
Meeting challenges in a growing world

Home About Us Crop Protection Plant Biotechnology Resources Contact Us

database home technology overview about us library intellectual property

The CropLife International Detection Methods Database

Background

Genetically modified (GM) crops were first introduced in 1994 and have now been adopted by farmers in more than 70 countries (ISAAA Brief 54). As a result, grain trade of GM crops continues to increase, and harmonization of detection methods is important to ensure consistent testing and efficient global trade.

Regions or countries have frequently adopted different approaches for the detection of GM crops and their products. These discrepancies can lead to variations in analytical results and even differing results between laboratories which could contribute to trade disruptions. GM traits in the marketplace are increasingly complex and require specialized and accurate detection methods. CropLife International and its members remain committed to supporting global trade by sharing industry-developed detection methods compliant with standardized guidelines. Harmonizing on these detection methods provides a path to the global harmonization of testing for GM crops and the reduction of the potential for trade disruptions.

The Database

CropLife International members have made these detection methods and related materials available in this online and searchable database. It comprises full descriptions of validated DNA methods based on PCR, and lists providers for protein-based detection methods for GM crops produced by CropLife members.

It is updated frequently and includes detection methods for commercialized GM crops developed by the four major private plant biotechnology developers (BASF, Bayer, Corteva, and Syngenta). [Methods may be licensed](#) freely by governments for regulatory purposes and for the detection of low levels of these GM crops.

SEARCH THE
DATABASE

Filter products by crop, protein,
developer, and more.

Subscribe to new alerts:

Complete the form below to
receive an alert when new
methods are added:

Enter email address...

Subscribe

You are able to unsubscribe at any
time.

Additional
Information

Click to
access
database

The Database - Selecting a Method



Meeting challenges in a growing world

AIAIA

Home

About Us

Crop Protection

Plant Biotechnology

Resources

Contact Us

database home

technology overview

about us

library

intellectual property

Search for a detection method:

Selecting Cotton, Potato & Monsanto will display all methods applicable to (Cotton OR Potato) AND developed by Monsanto

All Crops

Alfalfa
Canola/Oilseed Rape
Corn/Maize
Cotton
Potato

Scrolling bar

All Events (by common name)

281-24-236 x 3006-210-23
3272
5307
59122
A2704-12 / LL27

All Developers

BASF Agricultural Solutions Seed US LLC
Corteva Agriscience
Forage Genetics International
KWS
Monsanto

All Events (by OECD identifier)

DAS-24236-5 x DAS-21023-5
SYN-E3272-5
SYN-05307-1
DAS-59122-7
ACS-GM005-3

All Products

Agrisure Duracade® Corn/Maize
Agrisure Viptera® Corn/Maize
Agrisure® 3000GT Corn/Maize
Agrisure® 3120 Corn/Maize
Agrisure® CB/LL Corn/Maize

All Proteins

2mEPSPS
ADD
AHASL
AMY797E
APH4

The Database - Selecting a Method



Meeting challenges in a growing world

AIAIA

Home	About Us	Crop Protection	Plant Biotechnology	Resources	Contact Us
database home	technology overview	about us	library	intellectual property	

Search for a detection method:

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All Crops Alfalfa Canola/Oilseed Rape Corn/Maize Cotton Potato	BASF Agricultural Solutions Seed US LLC Corteva Agriscience Forage Genetics International KWS Monsanto Syngenta	All Products Agrisure Duracade® Corn/Maize Agrisure Viptera® Corn/Maize Agrisure® 3000GT Corn/Maize Agrisure® 3120 Corn/Maize Agrisure® CB/LL Corn/Maize
All Events (by common name) 281-24-236 x 3006-210-23 3272 5307 50122 A2704-12 / LL27	All Events (by OECD identifier) DAS-24236-5 x DAS-21023-5 SYN-E3272-5 SYN-05307-1 DAS-50122-7 ACS-GM005-3	DMO DvSnf7 eCry3.1Ab FAD2-1A FATB1-A goxv247

Sort products by: [Product Title](#) [Date Modified](#)

Agrisure Duracade®
Corn/Maize

**Hyperlink to DM
for product**

Events: (5307)
Proteins: eCry3.1Ab and PMI
Developed by Syngenta

Modified
08 Jul
2021

Product Information

Subscribe to new alerts:

Complete the form below to
receive an alert when new
methods are added:

Enter email address...

Product Pages



Agrisure Duracade® Corn/Maize

Developed by Syngenta

For more information about Agrisure Duracade® Corn/Maize, please refer to the published descriptions:

- [Syngenta](#)

PROTEIN METHODS:

eCry3.1Ab	PMI
Envirologix Romer Labs	Romer Labs

Providers for protein detection kits
(ELISA and Lateral Flow Strips)

5307
(SYN-05307-1)

CERTIFIED REFERENCE MATERIAL:
➤ AOCs

PROTEIN METHODS:
eCry3.1Ab ▼ PMI ▼

PCR METHODS:
Quantitative RT

Hyperlink to certified reference material (CRM)
provider homepage

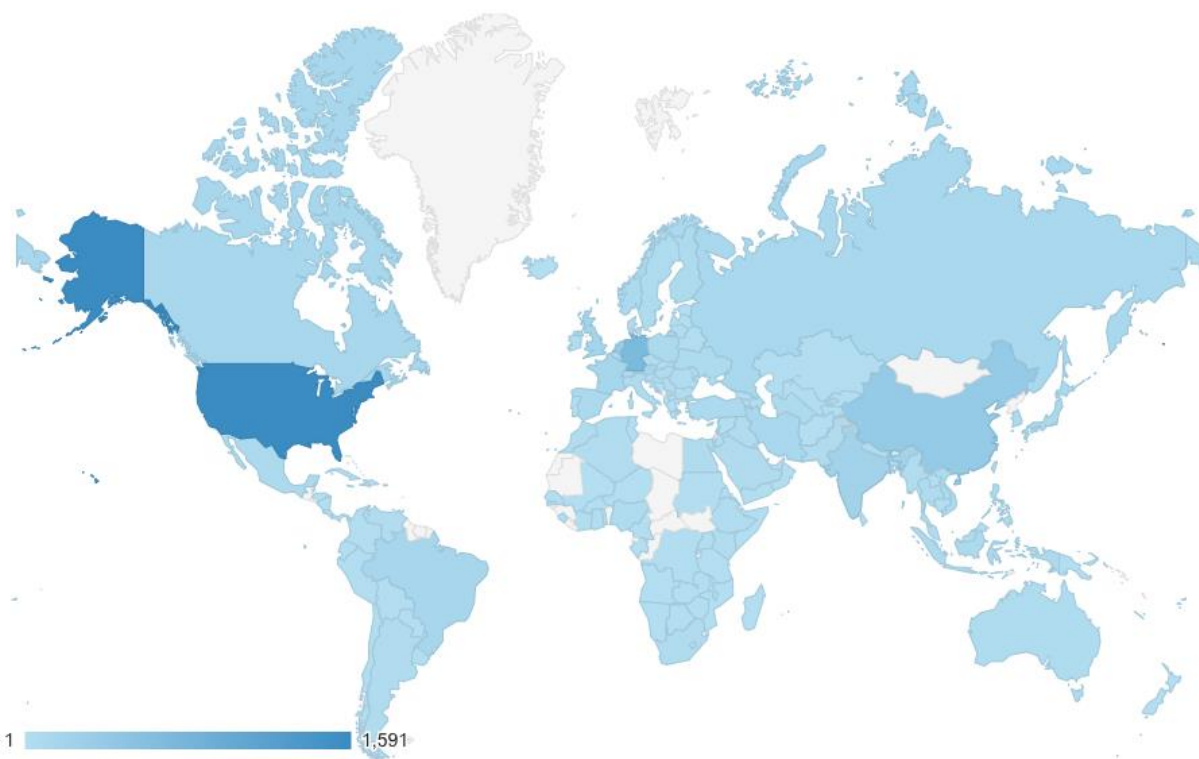
Hyperlink

Are you undertaking fee-for-service testing?

Yes

No

Database - Access Metrics (2022)



1.	 United States	1,396 (25.47%)
2.	 Germany	639 (11.66%)
3.	 China	307 (5.60%)
4.	 Netherlands	266 (4.85%)
5.	 India	164 (2.99%)
6.	 Austria	155 (2.83%)
7.	 France	126 (2.30%)
8.	 United Kingdom	122 (2.23%)
9.	 Iran	104 (1.90%)
10.	 Brazil	98 (1.79%)

Benefits to users

- Enables governments and companies to test commodities and food and feed products without additional legal agreements (unless performing fee-for-service testing)
- Users can be assured they are using up-to-date methods developed and validated by the trait developer
- Questions, inquiries can be sent directly to trait developer
- Database linked to Biosafety Clearing House information on LMOs (Living Modified Organisms)



This database only maintains information about the commercial status of agricultural biotechnology seeds from CropLife International member companies and may not be reflective of other companies that are selling or commercializing these products.

Market Status

Select the Market Status:

- ☒ Commodity Cultivation
- ☒ Last Seed Sales
- ☒ Non Commodity Cultivation
- ☒ Import
- ☒ Closed Loop Cultivation
- ☒ Not Commercialized

Type of Authorization

Select the Authorized For Option:

- ☒ Environmental/Cultivation
- ☒ Feed
- ☒ No Longer Authorized
- ☒ Environmental/Import
- ☒ Refer to Individual Event Status
- ☒ Food
- ☐ Safety Certificate

Crop

Select Crop:

- ☐ All Commodities
- ☐ Alfalfa
- ☐ Canola
- ☐ Corn
- ☒ Cotton
- ☐ Rice
- ☐ Soybean

Select Company:

- ☒ All Companies
- ☐ BASF
- ☐ Bayer CropScience
- ☐ Corteva™ Agriscience
- ☐ Syngenta

Company

Product

Select by:

- | Event Name | OECD Unique Identifier(s) | Product |
|------------|---------------------------|---------|
|------------|---------------------------|---------|
- * Indicates Combined Event Product

Select Country:

- ☒ All Countries
- ☐ Argentina
- ☐ Australia
- ☐ Australia/New Zealand
- ☐ Brazil
- ☐ Burkina Faso
- ☐ Canada

Country

Select by Last Updated Date:

- ☒ All Dates -OR- ☐ Specific Dates: to

Search

Reset Fields

BiotradeStatus



Total Results Returned: 415

(1 2 3 4 5) »

Group Results: ☒ Country ☐ Product ☐ Event ☐ OECD ☐ Market Status ☐ Authorized For

← Sorting options

Display: ☒ Product Name ☒ Event Name ☒ OECD Unique Identifier

Modify Search

ARGENTINA

Company	Product	Event	OECD	Crop	Market Status	Authorized For
BASF	None	T304-40	BCS- GHØØ4-7	Cotton	Not Commercialized as a Single Event	Environmental/Cultivation, Food, Feed
BASF	LibertyLink Cotton	LLCotton25	ACS-GHØØ1-3	Cotton	Not Commercialized	Environmental/Cultivation, Food, Feed
BASF	GlyTol Cotton	GHB614	BCS-GHØØ2-5	Cotton	Not Commercialized	Environmental/Cultivation, Food, Feed
BASF	GlyTol X TwinLink	GHB614 X T304-40 X GHB119	BCS-GHØØ2-5 X BCS- GHØØ4-7 X BCS- GHØØ5-8	Cotton	Not Commercialized	Environmental/Cultivation, Food, Feed
BASF	None	GHB119	BCS- GHØØ5-8	Cotton	Not Commercialized as a Single Event	Environmental/Cultivation, Food, Feed
BASF	GlyTol X Liberty Link	GHB614 X LL25Cotton	BCS-GHØØ2-5 X ACS-GHØØ1-3	Cotton	Not Commercialized	Environmental/Cultivation, Food, Feed
BASF	TwinLink	T304-40 X GHB119	BCS- GHØØ4-7 X BCS- GHØØ5-8	Cotton	Not Commercialized	Environmental/Cultivation, Food, Feed
BASF	GlyTol LibertyLink TwinLink Plus	GHB614 X T304-40 X GHB119 X COT102	BCS-GHØØ2-5 X BCS-GHØØ4-7 X BCS- GHØØ5-8 X SYN-IR102-7	Cotton	Import	Environmental/Cultivation, Food, Feed
Bayer CropScience	Roundup Ready Cotton	MON 1445	MON-Ø1445-2	Cotton	Last Seed Sales: 2016	Environmental/Cultivation, Food, Feed
Bayer CropScience	Bollgard Cotton	MON 531	MON-ØØ531-6	Cotton	Last Seed Sales: 2012	Environmental/Cultivation, Food, Feed
Bayer CropScience	Roundup Ready with Bollgard Cotton	MON 531 X MON 1445	MON-ØØ531-6 X MON-Ø1445-2	Cotton	Last Seed Sales: 2016	Environmental/Cultivation, Food, Feed

AUSTRALIA

Company	Product	Event	OECD	Crop	Market Status	Authorized For
Bayer CropScience	Bollgard Cotton	MON 531	MON-ØØ531-6	Cotton	Last Seed Sales: 2001	Environmental/Cultivation
Bayer CropScience	Genuity Bollgard II with Roundup Ready Flex Cotton	MON 88913 X MON 15985	MON-88913-8 X MON-15985-7	Cotton	Commodity Cultivation	Environmental/Cultivation
Bayer CropScience	Bollgard 3 XtendFlex	COT102 X MON 15985 X MON 88913 X MON 88701	SYN-IR1Ø2-7 X MON-15985-7 X MON-88913-8 X MON-887Ø1-3	Cotton	Import	Environmental/Cultivation, Feed
Bayer CropScience	Genuity Bollgard II with Roundup Ready Cotton	MON 15985 X MON 1445	MON-15985-7 X MON-Ø1445-2	Cotton	Last Seed Sales: 2010	Environmental/Cultivation

Thank You!

